

<b>S.D. Warren Company</b>	)	<b>Department</b>
<b>Cumberland County</b>	)	<b>Findings of Fact and Order</b>
<b>Westbrook, Maine</b>	)	<b>Part 70 Air Emission License</b>
<b>A-29-70-A-I</b>		

After review of the Initial Part 70 License application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A, Section 344 and Section 590, the Department finds the following facts:

## **I. Registration**

### **A. Introduction**

FACILITY	S.D. Warren Company Westbrook Mill (S.D. Warren)
LICENSE NUMBER	A-29-70-A-I
LICENSE TYPE	Initial Part 70 License
NAICS CODES	322121
NATURE OF BUSINESS	Papermill
FACILITY LOCATION	Westbrook, Maine
DATE OF LICENSE ISSUANCE	December 31, 2003
LICENSE EXPIRATION DATE	December 31, 2008

### **B. Emission Equipment**

1. The following fuel burning emission units are addressed by this Part 70 License:

<b>EMISSION UNIT ID</b>	<b>UNIT CAPACITY</b>	<b>UNIT TYPE</b>
Boiler #21	1074 MMBtu/hr	Biomass, oil, coal
*Boiler #17	232.7 MMBtu/hr	#2, #6 Fuel Oil Burning
*Boiler #18	232.7 MMBtu/hr	#2, #6 Fuel Oil Burning
*Boiler #20	247.8 MMBtu/hr	#2, #6 Fuel Oil Burning
Diesel #2 (Rotary Room)	1.91 MMBtu/hr	#2 Fuel Oil Burning
Diesel #4 (Feedwater)	0.49 MMBtu/hr	#2 Fuel Oil Burning
Technology Center Boiler	6.7 MMBtu/hr	Natural Gas Burning
Dryer (#35 Research Coater)	13.0 MMBtu/hr	Natural Gas Burning
Catalytic Incinerator (#20 Coater)	5.0 MMBtu/hr	Natural Gas Burning

- \* Designates Boilers that have licensed heat input restrictions of 199.0 MMBtu/hr as per Amendment #13 to Air Emission License A-29-71-C-A/R.

**S.D. Warren Company  
Cumberland County  
Westbrook, Maine  
A-29-70-A-I**

)  
)  
)  
2

**Department  
Findings of Fact and Order  
Part 70 Air Emission License**

2. The following process emission units are addressed by this Part 70 License:

<b>EMISSION UNIT ID</b>	<b>UNIT CAPACITY</b>	<b>UNIT TYPE</b>
#9 Paper Machine	NA	Paper Machine
#11 Paper Machine	NA	Paper Machine
#14 Paper Machine	NA	Paper Machine
#2 Coater	NA	Paper Coater
#20 Coater	NA	Paper Coater
#70 Coater	NA	Paper Coater
#35 Research Coater	NA	Paper Coater
Starch Pneumatic Conveyor (#1/Silo)	NA	Process Equipment
Starch Pneumatic Conveyor (#2/Color Room D)	NA	Process Equipment
Clay Pneumatic Conveyor (#1/Silo)	NA	Process Equipment
Clay Pneumatic Conveyor (#2/Color Room D)	NA	Process Equipment
#2 Fuel Oil Storage Tank (Recovery Area)	100,000 Gallons	Storage Tank
#6 Fuel Oil Storage Tank (Boilers 17-21)	500,000 Gallons	Storage Tank
Gasoline Storage Tank	5,000 Gallons	Storage Tank
Ash Transfer Area	NA	Ash Transfer
Parts Washers	NA	Maintenance Equip.
Waste Treatment Plant System	15,000,000 gal/day	Waste Water Treatment

- \* Units capacities listed within the Findings of Fact section of this license are referenced for the purposes of description only. Capacities that are determined to be licensed limitations are stated in the Order section of this license.
- \* S.D. Warren Company Westbrook Mill has additional insignificant activities that do not need to be listed in the emission equipment table above. The list of insignificant activities can be found in the Part 70 license application and in Appendix B of Chapter 140 of the Department's Regulations.

**C. Application Classification**

The application for S.D. Warren Company Westbrook Mill does not include the licensing of increased emissions or the installation of new or modified equipment, therefore the license is considered to be an Initial Part 70 License issued under Chapter 140 of the Department's regulations for a Part 70 source.

## II. EMISSION UNIT DESCRIPTION

### A. Process Description

The S.D. Warren Company Westbrook Mill is a non-integrated paper mill producing printing, publishing and specialty coated papers from purchased pulps. S.D. Warren Company uses different mixtures of pulps and coatings to produce paper on three paper machines, four regulated paper-coating machines and four paper-coating machines that are insignificant activities. The mill also operates several power boilers to provide steam and electricity for the mill's processes.

The S.D. Warren Company Westbrook Mill formally included a Kraft pulp mill that ceased operation in June of 1999. As a result several licensed emissions sources were shut down including #3 Recovery Boiler, the Recovery Boiler smelt tank, #19 Boiler, the lime kiln, digesters, evaporators, causticizer, bleaching plant, etc. Shortly thereafter, S.D. Warren Company applied to the Department for certification of NOx offset credits under Chapter 113 of the Department's regulations. The offset credits were generated by the permanent shut down of the #3 Recovery Boiler, smelt tank, #19 Boiler and lime kiln. The Department granted certification of NOx offset credits in Order # A-29-71-AE-M. This Part 70 License does not affect the Department's certification of those NOx offset credits.

### B. Boiler # 21

S.D. Warren Company Westbrook Mill operates Boiler #21 as the mill's main source of steam and power and for the production of electricity for sale. Boiler #21 was manufactured in 1981 by Babcock & Wilcox and is subject to EPA's New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart D (Standards of Performance for Fossil Fuel Fired Steam Generating Units). Boiler #21 was permitted pursuant to Prevention of Significant Deterioration (PSD) permitting requirements in Amendment #1 (issued on March 11, 1981) to Air Emission License #1615 (issued on August 22, 1979).

Boiler #21 is a biomass boiler with a maximum design heat input rating of 1074 MMBtu/hr burning biomass fuel (wood chips, bark, waste paper, wood waste and sludge) and coal. The boiler also burns #6 fuel oil, on or off specification waste oil and utilizes #2 fuel oil as igniter fuel. Boiler #21 has a maximum design heat input capacity of 839 MMBtu/hr firing only coal and 597 MMBtu/hr firing only #6 fuel oil. Boiler #21 is equipped with and S.D. Warren Company calibrates, maintains and operates a continuous opacity monitor (COM) and continuous emission monitors (CEM) for the measurement of SO<sub>2</sub>, NO<sub>x</sub> and O<sub>2</sub> as required by EPA's NSPS, Subpart D.

Boiler #21 is equipped with a multi-cyclone mechanical dust collector and an electrostatic precipitator (ESP) for particulate emissions control. Air Emission License A-29-71-C-A/R established the PM/PM<sub>10</sub> Best Available Control Technology (BACT) emission limit at 0.08 lb/MMBtu. Compliance with particulate emission limits shall be demonstrated through biennial stack testing.

S.D. Warren Company shall establish an inspection/maintenance plan for the electrostatic precipitator. Until such time as S.D. Warren Company must comply with monitoring requirements in 40 CFR Part 63, Subpart DDDDD, the plan shall include maintaining a log of precipitator operation with entries made at least once per shift for the following points:

- 1) Primary and secondary voltages on each field
- 2) Primary and secondary current on each field

Visible emissions shall not exceed 20% opacity on a six-minute block average except for one 1 six-minute block average per hour period of not more than 27% opacity. As provided by Chapter 101 of the Department's regulations and 40 CFR Part 60.11(c), four hours of start-up or shutdown are exempt from opacity standards if the boiler is operated to minimize emissions. Excess opacity during other periods of startup, shutdown and periods of malfunction may be exempted by the Department per 40 CFR Part 60.11(c), MEDEP Chapter 101 and 38 MRSA 349 (9).

NO<sub>x</sub> Reasonable Available Control Technology (RACT) emissions limits are established in Chapter 138 of the Department regulations at 0.38 lbs/MMBtu based on a 24-hour block average for boilers, located in moderate nonattainment areas, firing coal or firing coal in conjunction with any other fuel. Chapter 138 also establishes NO<sub>x</sub> RACT emissions limits for boilers firing biomass or oil or any combination of biomass and oil and fuels other than coal at 0.30 lbs/MMBtu based on a 24-hour block average. Emissions during start-up, shutdown and malfunction are not included in determining 24-hour block emissions rates per Section 3(O) of Chapter 138 of the Department's regulations. 40 CFR Part 60, Subpart D also establishes NO<sub>x</sub> emissions limits of 0.7 lbs/MMBtu when firing coal alone or in conjunction with firing biomass and 0.3 lbs/MMBtu when firing oil alone or in conjunction with biomass, both on a 3-hour block average basis. Compliance shall be demonstrated through operation of a NO<sub>x</sub> continuous emissions monitor (CEM) on the boiler.

Air Emission License A-29-71-C-A/R established SO<sub>2</sub> BACT emission limits for Boiler #21 at 1.2 lbs/MMBtu based on a 3-hour block average. Air Emission License A-29-71-C-A/R also established a coal sulfur content limit of 0.79% for 13150 BTU/lb coal or its equivalent sulfur per Btu content whenever the coal contribution is greater than 60% of the BTUs fired and an SO<sub>2</sub> emissions limit of 0.9 lbs/MMBtu during coal firing periods of less than 60% with a maximum allowable coal sulfur limit of 1.5%. S.D. Warren proposes that the coal sulfur content requirements be eliminated and that SO<sub>2</sub> emissions be restricted to the MEDEP Chapter 106 emission standard of 0.96 lbs/MMBtu during all periods of firing solid fossil fuel (i.e. coal). This emission limit would be more stringent than the 40 CFR Part 60, Subpart D SO<sub>2</sub> emission limit of 1.2 lbs/MMBtu during periods of firing solid fossil fuel or solid fossil fuel and wood in combination. 40 CFR Part 60, Subpart D requires SO<sub>2</sub> emissions be limited to no greater than 0.8 lbs/MMBtu during periods of oil firing, wood firing or a combination of wood and oil. Compliance shall be demonstrated through operation of an SO<sub>2</sub> continuous emissions monitor (CEM) on the boiler.

Amendment #20 to Air Emission License A-29-71-C-A/R established a 30-day average SO<sub>2</sub> emission limit on #21 Boiler of 0.8 lb/MMBtu. This limit represents the highest 30-day average SO<sub>2</sub> emission rate observed from the boiler and can only occur if the boiler was firing oil for 30 consecutive days and ran at its maximum emissions limit for the entire period. Annual and 30-day SO<sub>2</sub> emission calculations remain based on the 0.8 lb/MMBtu emission factor established in Amendment #20 to Air Emission License A-29-71-C-A/R.

Hourly emission limits and annual potential emissions for CO and VOC emissions for Boiler #21 were calculated based on AP-42 emission factors dated 9/98 for coal and oil firing and 7/01 for wood firing. Based on proper operation and the type of fuel for which the boiler is designed, it is unlikely that the boiler would exceed the CO and VOC limits. Therefore, periodic monitoring by the source for CO and VOC is not required.

### Streamlining

#### 1. Opacity

S.D. Warren Company accepts streamlining for opacity requirements. 40 CFR Part 60, Subpart D and Chapter 101 of the MEDEP regulations are applicable. The 40 CFR Part 60, Subpart D opacity limit is more stringent. Therefore, only the more stringent opacity limit is included in this license.

## 2. Particulate Matter

S.D. Warren Company accepts streamlining for lb/MMBtu particulate matter requirements. 40 CFR Part 60, Subpart D, Chapter 103 of the MEDEP regulations and BACT are applicable. The Chapter 103 and BACT licensed lb/MMBtu particulate matter limit is more stringent. Therefore, only the more stringent lb/MMBtu particulate matter limit is included in this license.

## 3. SO<sub>2</sub> Emissions

S.D. Warren Company accepts streamlining for SO<sub>2</sub> lb/MMBtu emissions requirements. 40 CFR Part 60, Subpart D, Chapter 106 of the MEDEP regulations and BACT are applicable. The MEDEP Chapter 106 emissions limit and the BACT emissions limit are more stringent. Therefore, only the more stringent SO<sub>2</sub> lb/MMBtu emissions limits are included in this license.

## 4. NO<sub>x</sub> Emissions

S.D. Warren Company accepts streamlining for NO<sub>x</sub> lb/MMBtu Emissions requirements when firing oil, biomass or any combination of oil and biomass. BACT, 40 CFR Part 60, Subpart D and MEDEP Chapter 138 Reasonable Available Control Technology (RACT) for Facilities that Emit Nitrogen Oxides are applicable. The BACT and 40 CFR Part 60, Subpart D lb/MMBtu emissions limit is more stringent. Therefore, only the more stringent NO<sub>x</sub> lb/MMBtu emissions limit is included in this license. (There is no streamlining of NO<sub>x</sub> emissions requirements for periods of coal firing.)

## CEMs and COM

Continuous emission monitoring includes operation of a continuous opacity monitor (COM) and continuous emission monitors (CEM) for the measurement of SO<sub>2</sub>, NO<sub>x</sub> and O<sub>2</sub> as required by EPA's NSPS, Subpart D and Chapter 117 of the Department's regulations.

## Periodic Monitoring

1. Periodic monitoring shall consist of record keeping which includes records of fuel use indicating amounts (gallons of oil, tons of biomass, wood, sludge, waste paper or coal) and purchase receipts or fuel supplier certifications for oil and coal, indicating percent sulfur by weight. S.D. Warren shall maintain the fuel use records on a monthly basis and a twelve-month rolling total basis.

2. Periodic monitoring shall also consist of record keeping of precipitator operation with entries made at least once per shift for primary and secondary voltages on each field and primary and secondary current on each field. (Periodic monitoring requirements relating to the ESP will be superceded by the continuous monitoring system (CMS) requirements of 40 CFR Part 63, Subpart DDDDD.)
3. Periodic monitoring shall include biennial stack testing using, EPA method 5, to ensure compliance with the particulate matter emission limit.

C. Boilers #17, #18 and #20

S.D. Warren Company operates Boilers #17, #18 and #20 as back-up boilers to Boiler #21. Boilers #17 and #18 were built and installed by Combustion Engineering in 1948 prior to EPA's NSPS applicability dates. They are twin boilers, located side by side and designed originally to burn pulverized coal as a primary fuel and #6 fuel oil as a back-up. In 1961 both boilers were switched over to #6 fuel oil as their primary fuel with a maximum design capacity to fire 1,572 gallons per hour, which is equivalent to 232.7 MMBtu/hr.

Boiler #20 fires #6 fuel oil and has a maximum design heat input capacity of 247.8 MMBtu/hr. The heat input capacity of Boiler #20 is below the 250 MMBtu/hr threshold for applicability of 40 CFR Part 60, Subpart D. The boiler was constructed in 1971 by Combustion Engineering, prior to the applicability date of 1984 established in 40 CFR Part 60, Subpart Db.

Amendment 13 to Air Emission License A-29-71-C-A/R established heat input restrictions on Boilers #17, #18 and #20 of 199.0 MMBtu/hr per boiler to avoid the requirement for operating a NO<sub>x</sub> CEM as per Chapters 117 and 138 of the Department's regulations. To insure compliance with the heat input restriction, S.D. Warren is required to restrict oil firing rates by use of oil supply valves or pneumatic controls such that the oil supplied to each of these boilers never exceed 10,575 pounds per hour (lb/hr) of #6 fuel oil (1,327 gal/hr). A mass-flow transmitter shall measure the oil flow rate to each boiler. In addition, daily fuel use records have and will continue to be kept for each of the boilers.

The three boilers have no particulate control devices. The boilers have O<sub>2</sub> monitors to aid the boiler operators to achieve efficient combustion and minimizing emissions. Installation of new combustion controls on Boilers #17, #18 and #20 also enables S.D. Warren Company to operate the boilers efficiently and to minimize emissions by employing proper combustion practices.

Chapter 103 of the Department's regulations establishes the particulate matter emission standard for oil-gas-petroleum burning sources of 0.2 lb/MMBtu. If either Boiler #17, #18 and #20 is operated at greater than 10% of its annual capacity in any calendar year and particulate matter stack testing was not conducted that year, S.D. Warren Company shall conduct a stack test for particulate matter emissions from that boiler during the following year. Under this paragraph, S.D. Warren Company shall not be required to test more frequently than every other year.

During periods when more than one of the three boilers is being operated at the same time, visible emissions from the main stack shall not exceed 30% opacity on a 6-minute block average, except for no more than three 6-minute block averages in a 3-hour period as per Chapter 101, Section 2(B)(5)(i). During periods when only one of the three boilers is being operated visible emissions from the main stack shall not exceed 30% opacity on a 6-minute block average, except for no more than two 6-minute block averages in a 3-hour period as per Chapter 101, Section 2(B)(1)(a)(i).

As provided by Chapter 101, Section 3(B) of the Department's regulations, the first four hours following the initial exceedance during the initiation of a cold start-up or a planned shutdown are exempt, provided that operating records are available to demonstrate that the facility was being operated to minimize emissions. Excess opacity during other periods of startup, shutdown and periods of malfunction may be exempted by the Department per MEDEP Chapter 101 and 38 MRSA 349 (9).

S.D. Warren Company is required to operate and maintain a continuous opacity monitor (COM) on the combined stack of Boilers #17, #18 and #20 as per Chapter 117 of the Department regulations.

Chapter 106 of the Department's regulations establishes the maximum allowed sulfur content of fossil fuels, which for #6 fuel oil is 2.0% sulfur by weight. Compliance with this restriction shall be demonstrated through maintaining purchase receipts or fuel supplier certification, indicating percent sulfur by weight.

The NO<sub>x</sub> RACT limit established in Chapter 138 of the Department's regulations for medium sized oil fired boilers in moderate nonattainment areas is 0.30 lb/MMBtu. New combustion controls on Boilers #17, #18 and #20 and O<sub>2</sub> monitors on the boilers enable the facility to operate the boilers efficiently and to minimize emissions by employing proper combustion practices to ensure that S.D. Warren Company meets the 0.30 lb/MMBtu NO<sub>x</sub> emission limit.



**S.D. Warren Company  
Cumberland County  
Westbrook, Maine  
A-29-70-A-I**

)  
)  
)  
9

**Department  
Findings of Fact and Order  
Part 70 Air Emission License**

Compliance with the NO<sub>x</sub> RACT limit shall be demonstrated through stack test results. If either Boiler #17, #18 and #20 is operated at greater than 10% of its annual capacity in any calendar year and stack testing for NO<sub>x</sub> was not conducted that year, S.D. Warren Company shall conduct a stack test for NO<sub>x</sub> emissions from that boiler during the following year. Under this paragraph, S.D. Warren Company shall not be required to test more frequently than every other year.

Maximum hourly emission limits and annual potential emissions for Boilers #17, #18 and #20 for CO and VOC were determined by using AP-42 emission factors data dated 7/01. Based on proper operation and the type of fuel for which the boilers are designed, it is unlikely the boilers would exceed the CO and VOC limits. Therefore, periodic monitoring by the source for CO and VOC is not required.

COM

Continuous emission monitoring includes operation of a continuous monitor for opacity on the combined stack in accordance with the requirements in Chapter 117 of the Department's Regulations.

Periodic Monitoring

1. Periodic monitoring shall consist of maintaining records of fuel use indicating amounts (gallons of oil) and purchase receipts or fuel supplier certification indicating percent sulfur by weight. S.D. Warren shall maintain the fuel use records for each boiler on a daily basis, a monthly basis and a twelve-month rolling total basis.
2. If either Boiler #17, #18 and #20 is operated at greater than 10% of its annual capacity in any calendar year and stack testing for particulate matter or NO<sub>x</sub> was not conducted that year, S.D. Warren Company shall conduct a stack test for particulate matter or NO<sub>x</sub> emissions from that boiler during the following year. Under this paragraph, S.D. Warren Company shall not be required to test more frequently than every other year.

**D. Stack Height Reduction**

On July 17, 1997, the Department issued Amendment #16 to Air Emission License A-29-71-C-A/R to S.D. Warren Company, permitting the reduction of the main stack height from 353 ft to 250 ft. In conjunction with the stack height reduction, S.D. Warren Company would be required to make a change to burning #6 fuel oil with a sulfur content of no greater than 0.7% in Boilers #17, #18 and #20.

Modeling was performed to demonstrate compliance with ambient air quality standards and increments at the reduced stack height.

Provided that S.D. Warren commits to burning only #6 fuel oil with a sulfur content no greater than 0.7% sulfur by weight in Boilers #17, #18 and #20, S.D. Warren Company may reduce the height of the main stack to no lower than 250 feet above ground level.

E. Boiler Emissions

1. In an effort to reduce the cost of mill operations, in 2002 S.D. Warren Company proposed to reduce its annual licensed emissions thereby reducing their annual emission license fee. In response, the Department issued Amendment #21 to Air Emission License A-29-71-C-A/R, which limits total annual licensed emissions from the four boilers. The reduced annual limits are contained in this license as state-only enforceable limits. S.D. Warren Company proposed to operate Boilers #17, #18, #20 and #21 in such a manner that the total SO<sub>2</sub>, NO<sub>x</sub> and VOC emissions from these boilers do not exceed the permitted annual SO<sub>2</sub>, NO<sub>x</sub> and VOC emissions for Boiler #21 alone. S.D. Warren Company also proposed to operate Boilers #17, #18, #20 and #21 in such a manner that the total PM/PM<sub>10</sub> emissions from these boilers do not exceed the permitted annual PM/PM<sub>10</sub> emissions for Boilers #17, #18 and #20 alone. S.D. Warren Company proposes to calculate the total rolling annual emissions on a monthly basis to ensure that the permitted annual emissions are not exceeded.

The following table reflects the reduction of the total licensed annual emissions from the boiler operations as a result of the proposed decrease in allowed operation time of S.D. Warren Company's power boilers as set forth in Air Emission License A-29-71-AG-M.

<b>Pollutant</b>	<b>Total Licensed Boiler Emissions Prior to Amendment #21 (TPY)</b>	<b>Total Licensed Boiler Emissions Per Amendment #21 (TPY)</b>
PM	899	523
PM <sub>10</sub>	899	523
SO <sub>2</sub>	5672	3763
NO <sub>x</sub>	2572	1787
VOC	205	179

2. S.D. Warren Company shall calculate annual emissions from Boiler #21 on a twelve-month rolling total, updated monthly, based on data from continuous emissions monitors (CEMs) for SO<sub>2</sub> and NO<sub>x</sub>. For PM, PM<sub>10</sub>, and VOC from Boiler #21, for all other criteria pollutants from Boilers #17, #18 and #20 and for when CEM data is not available for SO<sub>2</sub> and NO<sub>x</sub> from Boiler #21, S.D. Warren Company shall calculate annual emissions on a twelve-month rolling total, updated monthly, based on fuel consumption using the emission factors in the following tables.

**#21 Boiler**

<b><u>Pollutant</u></b>	<b><u>Emissions Factor</u></b>			
	<b><u>(Biomass)</u></b>	<b><u>(#6 fuel oil)</u></b>	<b><u>(coal)</u></b>	<b><u>(#2 fuel oil)</u></b>
PM	0.72	0.012	2.12	0.0112
PM <sub>10</sub>	0.72	0.012	2.12	0.0112
SO <sub>2</sub>	7.2	0.12	2.73	0.112
NO <sub>x</sub>	3.42	0.047	18	0.024
VOC	0.342	0.0016	0.3	0.00056

- \* Emissions factors are expressed in (lb/gal) pounds of pollutant per gallon of fuel fired for #6 and #2 fuel oil use or (lb/ton) pounds of pollutant per ton of biomass or coal fired.

**#17, #18 and #20 Boilers**

<b><u>Pollutant</u></b>	<b><u>Emission factor</u></b> <b><u>(#2 fuel oil)</u></b>	<b><u>Emission factor</u></b> <b><u>(#6 fuel oil)</u></b>
PM	0.03	0.03
PM <sub>10</sub>	0.03	0.03
SO <sub>2</sub>	0.07	0.11
NO <sub>x</sub>	0.045	0.045
VOC	0.0003	0.0013

- \* Emissions factors are expressed in (lb/gal) pounds of pollutant per gallon of fuel fired for #6 and #2 fuel oil use.

**Periodic Monitoring**

1. Periodic monitoring shall consist of the emissions record keeping described above. S.D. Warren shall maintain the emissions records on a monthly basis and a twelve-month rolling total basis.

F. Waste Oil

Amendment #7 to Air Emission License A-29-71-C-A/R established that S.D. Warren Company is permitted to burn a combined total of 10,000 gallons per year of “specification waste oil” and “off-specification waste oil” in their power boilers based on a twelve-month rolling total. The waste oil is generated on-site and added to the #6 fuel oil tank.

Only waste oil meeting the criteria “specification waste oil” or “off-specification waste oil” (as defined in the Department’s “Waste Oil Management Rules”) shall be burned in the power boilers.

Periodic Monitoring

1. Periodic monitoring of “specification” and “off-specification” waste oil burning shall be maintaining a record of waste oil added to the #6 fuel oil tank. The record shall include the amount of waste oil added to the #6 fuel oil tank and an analysis of a representative sample of the waste oil burned, at least once per year, showing that the oil meets the definition of “specification” and “off-specification” waste oil as found in the Department’s Waste Oil Management Rules. The record of the amount of waste oil added to the #6 fuel oil tank shall be maintained on a monthly and twelve-month rolling total basis.

G. Diesel Engines

S.D. Warren Company operates several diesel engines as sources of backup or emergency power. Diesel #1 is an 846 horsepower (HP) Caterpillar diesel located at the mill treatment plant. This diesel has a heat input capacity of 2.81 MMBtu/hr firing #2 fuel oil at a rate of 20.0 gallons per hour. Diesel #3 is a Cummins diesel and is utilized to power the emergency fire pump located in the fire pump building on the lower level of the truck-bridge spanning the river. Diesel #3 has a design heat input capacity of 0.67 MMBtu/hr firing #2 fuel oil at a rate of 4.8 gallons per hour. Diesels #1 and #3 make use of diesel fuel from the facility’s motor vehicle fuel tank. The motor vehicle fuel tank contains diesel fuel with a sulfur content not to exceed 0.05% sulfur by weight. Appendix B of Chapter 140 of the Department’s regulations lists the operation of stationary internal combustion engines with maximum design heat input of less than 3.0 MMBtu/hr firing fuel with a sulfur content of less than 0.05% sulfur by weight as insignificant activities and exempt from being included on Chapter 140 licenses. Therefore, Diesels #1 and #3 are included in this the “Finding of Facts” license for inventory purposes only.

To demonstrate that the operation of Diesels #1 and #3 remain insignificant activities, S.D. Warren shall maintain a fuel record for the two units that shall include fuel supplier certification indicating sulfur content of the fuel used in Diesel units #1 and #3.

Diesel #2 is a Cummins diesel located in the rotary room. Diesel #2 has a design heat input capacity of 1.91 MMBtu/hr firing #2 fuel at a rate of 13.6 gallons per hour. Diesel #4 is a Cummins diesel located adjacent to the boiler feedwater lab. Diesel #4 has a design heat input capacity of 0.5 MMBtu/hr firing #2 fuel oil at a rate of 3.5 gallons per hour. Diesels #2 and #4 use fuel from the facility's boiler house #2 fuel oil tank. The boiler house #2 fuel oil tank has a capacity of 100,000 gallons and contains #2 fuel oil with a sulfur content not to exceed 0.5% sulfur by weight.

An hour limit for Diesel #2 has been established in order to limit the unit to less than 10 tons per year NO<sub>x</sub> emissions and so avoiding Chapter 138 NO<sub>x</sub> RACT requirements. The potential to emit NO<sub>x</sub> from Diesel #4 is less than 10 tons/yr, therefore, an hour limit is not necessary. The following table contains a description of the Diesel #2 at the Westbrook mill including the hour limit.

Equipment	Fuel Type, sulfur content	Operating Hours Cap (< 10 tpy)
Diesel #2	#2 oil, 0.5%	2374 hours

S.D. Warren Company shall demonstrate compliance with hour limit on Diesel #2 by means of a meter that indicates the number of operating hours on the diesel and maintaining a log of monthly meter readings.

Visible emissions from Diesels #1 - #4 shall not exceed 30% opacity on a 6-minute block average, except for no more than two 6-minute block averages in a 3-hour period.

Maximum hourly emission limits and potential annual emissions for Diesels #2 and #4 for particulate matter, SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC were determined by using AP-42 emission factors dated 10/96 and hour limits.

#### Periodic Monitoring

Periodic monitoring for Diesel #2 shall consist of maintaining and operating an hour meter and recording the hour meter reading once per month. S.D. Warren shall maintain the log of hour meter readings on a monthly basis and a twelve-month rolling total basis.

H. Technology Center Boiler

S.D. Warren Company operates a small boiler located in the mill's Technology Center. The boiler is utilized for steam heating needs for the Technology Center in event that the facility's power boilers cannot supply enough steam to meet the needs of the Technology Center. The Technology Center boiler is existing equipment that has not been addressed in any previous license, therefore, requires a demonstration that emissions are receiving (BACT), pursuant to Chapter 115 of the Department's regulations. The boiler was manufactured by Clever-Brooks in 1969 and has a maximum design heat input capacity of 6.7 MMBtu/hr firing natural gas at a firing rate of 6,700 standard cubic feet per hour (scf/hr). The Technology Center boiler capacity is below the applicability criteria of EPA's NSPS, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units). The Technology Center boiler has the potential to emit approximately 3.0 tons per year of NO<sub>x</sub>, therefore it is below the threshold for applicability of the NO<sub>x</sub> RACT requirements in Chapter 138 of the Department's regulations.

BACT maximum hourly emission limits and potential annual emissions for the Technology Center boiler for Particulate matter, SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC were determined by using AP-42 emission factors dated 7/98.

Visible emissions from the natural gas fired Technology Center boiler shall not exceed 10% opacity on a 6-minute block average.

Streamlining

1. Opacity

S.D. Warren Company accepts streamlining for opacity requirements. Chapter 101, Section 2(B)(1)(c) of the Department's regulations and Best Available Control Technology (BACT) requirements are applicable. The BACT opacity limit is more stringent. Therefore, only the more stringent BACT opacity limit is included in this license.

2. Particulate Matter

S.D. Warren Company accepts streamlining for particulate matter requirements. Chapter 103, Section 2(B)(1) of the Department's regulations and BACT requirements are applicable. The BACT particulate matter limit is more stringent. Therefore, only the more stringent BACT particulate matter limit is included in this license.

Periodic Monitoring

Based on firing natural gas only, it is unlikely that the Technology Center Boiler will exceed applicable limits. Therefore, periodic monitoring for this unit is not required.

I. #35 Research Coater

S.D. Warren Company operates a small coater, designated #35 Research Coater, in their Technology Center to test different coating grades. The coater makes use of aqueous-based coating materials only, (i.e., coatings that meet the low solvent coating requirements in Chapter 123 of the Department's regulations). The #35 Research Coater is subject to the requirements for use of low solvent coatings in Chapter 123 of the Department's regulations on paper coatings. The #35 Research Coater is used for running coatings experimentally. As such, the coater runs a variety of coatings for a short period of time. The coatings are not run for production purposes. S.D. Warren Company will meet periodic monitoring requirements and Chapter 123 by maintaining records of the total VOCs emitted from the #35 Research Coater on a monthly basis and a certification that all coatings used contain less than 2.9 pounds of VOC per gallon.

Periodic Monitoring

As Required by Chapter 123 Section 5(D), S.D. Warren Company shall maintain records of the following on site for the #35 Research Coater on a monthly basis.

- 1) Time period;
- 2) Total VOCs emitted; and
- 3) Certification stating all coatings used on the #35 Research Coater have an as applied VOC content less than 2.9 pounds of VOC per gallon of coating, excluding water and exempt compounds.

S.D. Warren shall maintain records of VOCs emitted on a twelve-month rolling total basis.

S.D. Warren Company is required to maintain copies of all records and reports required by Chapter 123 for a minimum period of six years. The records are required to be available during normal business hours and copies provided to the department upon request.

J. Dryer on #35 Research Coater

S.D. Warren Company operates a dryer for their #35 Research Coater. The dryer is used to provide heat for convection drying of paper coatings during coating trials on the #35 Research Coater. The dryer unit is located in the Technology Center and was manufactured by W.R. Grace in 1985. The dryer has a 13.0 MMBtu/hr maximum design heat input capacity firing natural gas. The dryer on #35 Research Coater is existing equipment that has not been addressed in any previous licensing, therefore, requires a demonstration that emissions are receiving BACT, pursuant to Chapter 115 of the Department's regulations. The dryer has the potential to emit approximately 6.0 tons per year of NO<sub>x</sub>, therefore it is below the threshold for applicability of NO<sub>x</sub> RACT requirements in Chapter 138 of the Department's regulations.

BACT maximum hourly emission limits and potential annual emissions for the dryer on #35 Research Coater for particulate matter, SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC were determined by using AP-42 emission factors dated 7/98.

Visible emissions from the natural gas fired #35 Research Coater Dryer shall not exceed 10% opacity on a 6-minute block average.

Streamlining

1. Opacity

S.D. Warren Company accepts streamlining for opacity requirements. Chapter 101, Section 2(B)(1)(f) of the Department's regulations and BACT requirements are applicable. The BACT opacity limit is more stringent. Therefore, only the more stringent BACT opacity limit is included in this license.

2. Particulate Matter

S.D. Warren Company accepts streamlining for particulate matter requirements. Chapter 103, Section 2(B)(1)(c) of the Department's regulations and BACT requirements are applicable. The BACT particulate matter limit is more stringent. Therefore, only the more stringent BACT particulate matter limit is included in this license.

Periodic Monitoring

Based on firing natural gas only, it is unlikely that the #35 Research Coater Dryer will exceed applicable limits. Therefore, periodic monitoring for this unit is not required.



K. #70 Coater

S.D. Warren Company operates an off-line coater designated as #70 Coater. The #70 Coater was manufactured by the Beloit Corporation and installed in 1970. The #70 Coater uses aqueous based paper coatings only. Although the coatings are called aqueous based, there are VOCs in some of the coatings. The #70 Coater is subject to Chapter 123 of the Department's regulations on paper coatings.

Periodic Monitoring

As required by Chapter 123 Part 5(D), S.D. Warren Company shall maintain records of the following on site for the #70 Coater on a monthly basis.

- 1) Time period;
- 2) Coating identification number or name and amount of VOC containing constituents used;
- 3) Diluent identification number or name and amount of diluent used (excluding water and exempt compounds);
- 4) Mass of VOC per volume of each coating, excluding water and exempt compounds, as applied;
- 5) Total VOCs emitted; and
- 6) Certification stating all coatings used on the #70 Coater have an as applied VOC content less than 2.9 pounds of VOC per gallon of coating, excluding water and exempt compounds.

In addition to the Chapter 123 record keeping requirements on coatings use, S.D. Warren shall maintain records of VOCs emitted from #70 Coater on a twelve-month rolling total basis.

S.D. Warren Company is required to maintain copies of all records and reports required by Chapter 123 for a minimum period of six years. The records are required to be available during normal business hours and copies provided to the department upon request.

L. #20 Coater

S.D. Warren Company operates #20 Coater for coating paper produced at the mill. The #20 Coater was manufactured by Black Clawson and was most recently rebuilt in 1984. The #20 Coater has an approximate production rate of 70 tons per day. The #20 Coater utilizes a catalytic incinerator to control VOC emissions when running grades of coating with greater than 2.9 pounds of VOC per gallon (lb/gal) of coating.

The #20 Coater is subject to Chapter 123 of the Department's regulations on paper coating. Chapter 123 Section 3(A) requires that when operating uncontrolled the coater shall not emit VOC in excess of 2.9 pounds per gallon of coating. Chapter 123 Section 3(B) requires that if the coater is to apply coatings containing greater than 2.9 pounds of VOC per gallon of coating, the coater must be operated in conjunction with an add-on air pollution control device that will reduce VOC emissions by 95% or to a rate equal to 4.8 pounds of VOC per gallon of solids applied.

Amendment #21 to Air Emission License A-29-71-C-A/R established an annual VOC emissions cap for the #20 Coater operations of 100 tons of VOC per year. Compliance with the annual VOC emissions cap shall be demonstrated through coatings use records and destruction efficiencies based on stack test results. In addition to the Chapter 123 record keeping requirements on coatings use, S.D. Warren shall maintain records of VOC emissions from coatings use on a twelve-month rolling total basis.

#### Periodic Monitoring

As Required by Chapter 123 Part 5(C), S.D. Warren Company shall maintain records of the following on site for the #20 Coater on a daily basis.

- 1) Coating line number;
- 2) Time period;
- 3) Coating identification number or name;
- 4) Amount of coating used;
- 5) Diluent identification number or name;
- 6) Amount of diluent used.

(The facility shall also record the information in numbers 5 and 6 above for any diluents and solvents used for clean-up operations.)

If S.D. Warren Company can certify that all of the coatings used at #20 Coater have an as applied VOC content of less than 2.9 pounds per gallon of coating, records may be kept on a monthly basis as set forth in Chapter 123, Section 5(D).

In addition to the Chapter 123 record keeping requirements on coatings use, S.D. Warren shall maintain records of VOCs emitted from #20 Coater on a twelve-month rolling total basis.

S.D. Warren Company is required to maintain copies of all records and reports required by Chapter 123 for a minimum period of six years. The records are required to be available during normal business hours and copies provided to the department upon request.

M. #20 Coater's Catalytic Incinerator

S.D. Warren Company utilizes a catalytic incinerator for capture and destruction of VOC emissions from the use of certain coatings on #20 Coater. As required by Chapter 123 of the Department's regulations, the catalytic incinerator is operated as an add-on device for VOC control when coatings applied by the #20 Coater contain VOCs in excess of 2.9 pounds per gallon of coating used. The catalytic incinerator was manufactured by ARI International in 1990 and has an auxiliary fuel heat input capacity of 5.0 MMBtu/hr firing natural gas. The overall efficiency of the abatement equipment reduces VOC emissions by 95% or to a rate equal to 4.8 pounds of VOC emitted per gallon of solids applied.

Amendment #3 to Air Emission License A-29-71-C-A/R established emission limits that represent BACT for the operation of the catalytic incinerator as the following:

Pollutant	lbs/hour
PM	0.12
PM <sub>10</sub>	0.12
SO <sub>2</sub>	0.006
NO <sub>x</sub>	1.0
CO	1.8

The catalytic incinerator is subject to Chapter 123 Section 3. This regulation requires that S.D. Warren Company operate the incinerator at all times that #20 Coater is applying coatings containing greater than 2.9 pounds of VOC per gallon. S.D. Warren Company is not required to operate the incinerator when #20 Coater is applying coatings containing less than 2.9 pounds of VOC per gallon. MEDEP Chapter 123 Section 3 requires that VOCs be captured and the incinerator be operated in such a manner that overall VOC emissions are reduced by 95%, or a rate equal to 4.8 pounds of VOC emitted per gallon of solids applied to the substrate. Compliance with the emissions limits shall be demonstrated through stack test result data run in accordance with Chapter 123 testing guidelines.

Chapter 123 requires that S.D. Warren continuously monitor and record the incinerator exhaust temperature (°F), the temperature rise across the bed (°F) and the dates of catalyst bed changes. S.D. Warren Company shall be required to maintain copies of all records and reports required by Chapter 123 for a minimum period of six years. The records are required to be available during normal business hours and copies provided to the Department upon request.

Amendment #12 to Air Emission License A-29-71-C-A/R established additional state-only requirements for the operation of the catalytic incinerator. Those requirements are as follows:

- 1) The inlet temperature to the incinerator shall be maintained at no less than 775°F;
- 2) Water will continuously flow to the wet scrubber on the air knife coater at all times while the coater is in operation; and
- 3) S.D. Warren Company will continue to operate the DEP approved catalyst maintenance program for the catalytic incinerator which includes the following:
  - Add enough catalyst to maintain the bed at a depth of eight inches;
  - Measure the pressure drop across the bed at normal operating conditions while running ETL coating. This will establish the baseline.
  - Whenever the pressure drop across the bed drops below 90% of the baseline while running ETL, one 250-pound drum of catalyst shall be added.
- 4) Total VOC emissions from the coater will be tested as per Chapter 126 once every two years. During testing, the coater will run ETL coating, which is the coating with the highest VOC content of all the coatings that S.D. Warren Company uses, while also running the widest web during normal operations.

Chapter 126 also requires that the facility shall maintain a copy of the capture efficiency testing protocol and submit the results to the Department within 60 days of the test. S. D. Warren Company shall notify the Department within 30 days of the testing. S.D. Warren Company shall notify the Department of any changes to the testing protocol and perform new testing if requested to do so by the Department.

Amendment #3 to Air Emission License A-29-71-C-A/R established emissions limits for the catalytic incinerator for Particulate matter, SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC emissions.

Visible emissions from the natural gas fired catalytic incinerator shall not exceed 20% opacity on a 6-minute block average during periods when the coater is running ETL coating and 10% opacity on a 6-minute block average when the coater is running any other coating.

S. D. Warren Company shall periodically evaluate the visible emissions from the catalytic incinerator and submit reports to the Department detailing their findings. Based on the results of S. D. Warren Company's evaluations, the visible emission restriction for the natural gas fired catalytic incinerator will be reevaluated upon renewal of the license.

#### Streamlining

1. S.D. Warren Company accepts streamlining for opacity requirements. Chapter 104, Section 2(B) and Best Practical Treatment (BPT) requirements are applicable. The BPT opacity limit is more stringent. Therefore, only the more stringent BPT opacity limit is included in this license.

#### Periodic Monitoring

1. Periodic Monitoring shall include conducting a biennial stack test for VOCs in accordance with Chapter 123 Section 4 while running ETL coating.
2. Periodic monitoring shall also include Chapter 123 monitoring and record keeping requirements.
3. Periodic monitoring shall also include maintaining the capture efficiency testing records as required by Chapter 126 of the Departments regulations.
4. S.D. Warren Company is required to maintain copies of all records and reports required by Chapter 123 for a minimum period of six years. The records are required to be available during normal business hours and copies provided to the department upon request.

#### N. #2 Coater

The #2 Coater at the S.D. Warren Company Westbrook Mill was originally installed in 1963. The #2 Coater was capable of operating with either solvent-based or aqueous-based coatings. The #2 Coater was operated until the fall of 2001 at which time it was shut down. In March, 2002, S.D. Warren Company applied to the Department to make several changes to its existing air emission license to reduce annual air emission fees. One of the changes was to reflect the shut down of the #2 Coater. In February 2003, S.D. Warren Company applied to the Department to permit the reactivation of the #2 Coater. Upon reactivation, S.D. Warren Company proposed to use only aqueous-based coatings on the #2 Coater. In Amendment #22 to Air Emission License A-29-71-C-A/R, the Department approved reactivation of the #2 Coater. The Department determined that BACT for the #2 Coater to be the use of only aqueous-based coatings and an annual VOC emission limit of 39.7 tons/yr of VOCs.

In accordance with the requirements of the Departments BACT findings and Chapter 123 of the Department's regulations, the #2 Coater is subject to the following requirements:

1. VOC emissions shall not exceed 2.9 lbs of VOC per gallon of coating (excluding water and exempt compounds) delivered to the coating applicator from the paper coating line.
2. Annual VOC emissions from #2 Coater shall not exceed 39.7 tons/yr of VOCs on a twelve-month rolling total basis.
3. For determining the VOC content of coatings, S.D. Warren Company shall use the coating formulae.
4. For determining VOC emissions, S.D. Warren Company shall use mass balance calculations assuming 100% volatilization of VOCs.

#### Periodic Monitoring

As required by Chapter 123 Section 5(D), S.D. Warren Company shall maintain records of the following on site for the #2 coater on a monthly basis:

- 1) Time period;
- 2) Coating identification number or name and amount of VOC containing constituents used;
- 3) Diluent identification number or name and amount of diluent used (excluding water and exempt compounds);
- 4) Mass of VOC per volume of each coating, excluding water and exempt compounds, as applied;
- 5) Total VOCs emitted; and
- 6) Certification stating all coatings used at the #2 Coater have an as applied VOC content less than 2.9 pounds of VOC per gallon of coating, excluding water and exempt compounds.

In addition to the Chapter 123 record keeping requirements on coatings use, S.D. Warren shall maintain records of VOCs emitted from the #2 Coater on a twelve-month rolling total basis.

S.D. Warren Company is required to maintain copies of all records and reports required by Chapter 123 for a minimum period of six years. The records are required to be available during normal business hours and copies provided to the department upon request.

O. 4<sup>th</sup> Zone Dryer on #2 Coater

S.D. Warren Company operates a natural gas fired dryer with a maximum design heat input capacity of 6.0 MMBtu/hr firing natural gas and is used to provide heat for drying of paper coatings applied by the #2 Coater. The dryer is existing equipment that has not been addressed in any previous license, therefore, requires a demonstration that emissions are receiving BACT, pursuant to Chapter 115 of the Department's regulations.

The dryer has the potential to emit NO<sub>x</sub>, well below the threshold for applicability of NO<sub>x</sub> RACT requirements in Chapter 138 of the Department's regulations.

BACT maximum hourly emission limits and potential annual emissions for the dryer on #2 Coater for particulate matter, SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC were determined by using AP-42 emissions factors dated 7/98.

Visible emissions from the natural gas fired dryer shall not exceed 10% opacity on a 6-minute block average.

Streamlining

1. Opacity

S.D. Warren Company accepts streamlining for opacity requirements. Chapter 101, Section 2(B)(1)(f) of the Department's regulations and BACT requirements are applicable. The BACT opacity limit is more stringent. Therefore, only the more stringent BACT opacity limit is included in this license.

2. Particulate Matter

S.D. Warren Company accepts streamlining for particulate matter requirements. Chapter 103, Section 2(B)(1)(a) of the Department's regulations and BACT requirements are applicable. The BACT particulate matter limit is more stringent. Therefore, only the more stringent BACT particulate matter limit is included in this license.

P. Paper Machines and On-Line Coater

S.D. Warren Company operates three paper machines designated #9 Paper Machine, #11 Paper Machine and #14 Paper Machine. #9 Paper Machine was manufactured by Beloit, most recently rebuilt in 1963 and has a production rate of approximately 185 tons of paper per day (tons/day). #11 Paper Machine was manufactured by Beloit, most recently rebuilt in 1968 and has a production rate of approximately 160 tons/day. #14 Paper Machine was manufactured by Beloit, most recently rebuilt in 1980 and has a production rate of approximately 250 tons/day. The raw materials used by the paper machines are pulp and paper making additives. Paper machines #11 and #14 are not equipped with on-line coaters. There are no applicable requirements for paper machines #11 and #14.

Paper machine #9 is equipped with an on-line coater, which uses aqueous based paper coatings only. Although the coatings are called aqueous based, there are VOCs in some of the coatings. Paper Machine #9 on-line Coater is subject to Chapter 123 of the Department's regulations on paper coatings.

Periodic Monitoring

As required by Chapter 123 Part 5(D), S.D. Warren Company shall maintain records of the following on site for Paper Machine #9 On-line Coater on a monthly basis.

- 1) Time period;
- 2) Coating identification number or name and amount of VOC containing constituents used;
- 3) Diluent identification number or name and amount of diluent used (excluding water and exempt compounds);
- 4) Mass of VOC per volume of each coating, excluding water and exempt compounds, as applied;
- 5) Total VOCs emitted; and
- 6) Certification stating all coatings used at the #9 Paper Machine On-line Coater have an as applied VOC content less than 2.9 pounds of VOC per gallon of coating, excluding water and exempt compounds.

In addition to the Chapter 123 record keeping requirements on coatings use, S.D. Warren shall maintain records of VOCs emitted from the #9 Paper Machine On-line Coater on a twelve-month rolling total basis.

S.D. Warren Company is required to maintain copies of all records and reports required by Chapter 123 for a minimum period of six years. The records are required to be available during normal business hours and copies provided to the department upon request.



Q. MACT for Paper Coaters

On December 4, 2002 EPA promulgated National Emissions Standards for Hazardous Air Pollutants: Paper and Other Web Coatings at 40 CFR Part 63, Subpart JJJJ. The #2 Coater, #20 Coater, #70 Coater, the #9 Paper Machine On-line Coater and maybe the four coaters that are insignificant activities (coaters #1, 2, 3 and 4) are subject to the applicable requirements of Subpart JJJJ with a compliance date of December 5, 2005. The #35 Research Coater is utilized for research purposes only and is therefore not subject to Subpart JJJJ per 40 CFR Part 63.3300(g).

R. Bulk Handling Systems

S.D. Warren Company operates several bulk handling systems for transport of starch and clay from railcars to onsite storage silos and then from these storage silos to handling areas. Starch pneumatic conveyor #1 has a capacity of 41 tons of material per hour (tons/hr) and utilizes a baghouse for particulate control. Starch pneumatic conveyor #2 has a capacity of 18 tons/hr and utilizes a wetted cyclone for particulate control. Clay pneumatic conveyor #1 has a capacity of 36 tons/hr and utilizes a baghouse for particulate control. Clay pneumatic conveyor #2 has a capacity of 24 tons/hr and utilizes a baghouse and a wet scrubber. The particulate control devices are designed to control particulate emissions to no greater than 5% opacity. The baghouses are of the pulse-jet type and have rated efficiencies of 99.9%. The scrubber handles exhaust from three Cowles mixers and four kettle tanks and has a rated efficiency of 98% and can handle 10,000 cfm of air.

S.D. Warren Company shall establish an inspection/maintenance plan for the bulk handling systems. The plan shall provide for periodic inspection and for record keeping of inspection findings and maintenance or repairs done on the equipment. The bulk handling systems if operating correctly and inspected regularly should not cause excess emissions. The Department finds BPT for these sources to be an inspection/maintenance program that provides for monthly inspections and a record of inspection findings and required maintenance.

As per Chapter 101, Section (2)(B)(3)(d), visible emission from the baghouses, wetted cyclone and the wet scrubber shall not exceed 20% opacity on a 6-minute block average, except for no more than one 6-minute block average in a one-hour period.

Periodic Monitoring

1. Periodic monitoring shall include the establishment and implementation of an inspection/maintenance plan.

2. Periodic monitoring shall include maintaining a record of monthly inspections and maintenance on the bulk handling systems.

S. Storage Tanks

S.D. Warren Company utilizes several storage tanks for the storage of liquid organic material. These tanks include a 100,000 gallon #2 fuel oil tank, a 500,000 gallon #6 fuel oil tank and a 5,000-gallon gasoline tank. S.D. Warren has several smaller storage tanks for diesel fuel, #2 fuel oil and LPG that are considered insignificant because of their small size.

The 100,000 gallon #2 fuel oil tank was manufactured in 1988. EPA's NSPS Subparts K and Ka exclude #2 fuel oil from their definition of *petroleum liquid*, therefore the 100,000 gallon #2 fuel oil tank is not subject to EPA's NSPS Subparts K and Ka. The true vapor pressure of #2 fuel oil is less than 0.7 kPa (0.1 psi) at ambient temperatures, which is below the applicability threshold of 3.5 kPa for EPA's NSPS Subpart Kb, therefore, the 100,000 gallon #2 fuel oil tank is not subject to EPA's NSPS Subpart Kb.

The 500,000 gallon #6 fuel oil tank was manufactured in 1973. EPA's NSPS Subparts K and Ka exclude #6 fuel oil from their definition of *petroleum liquid*, therefore the 500,000 gallon #6 fuel oil tank is not subject to EPA's NSPS Subparts K and Ka. The 500,000 gallon #6 fuel oil tank was manufactured prior to EPA's NSPS Subpart Kb applicability date of July 23, 1984; therefore the 500,000 gallon #6 fuel oil tank is not subject to EPA's NSPS Subpart Kb.

The 5,000-gallon gasoline tank was manufactured in 1993. The tank is below the capacity threshold for applicability to EPA's NSPS Subparts K, Ka and Kb. The tank is subject to the submerged fill pipe requirement MEDEP Chapter 118, Section 3(A) on gasoline dispensing vapor control. The facility is also subject to the record keeping requirements of Chapter 118, Section 9(B).

Periodic Monitoring

Periodic monitoring shall include record keeping in accordance with MEDEP Chapter 118 Section 9(B) for the gasoline storage tank.

T. Ash Loading System

S.D. Warren Company utilizes an ash transfer system to handle fly ash generated from the operation of #21 Boiler. The system was manufactured in 1982 and loads an average of approximately 80 tons/day of fly ash from the silo into trucks.

The system stores the ash in a silo until it is transferred to either the wet or dry ash loading areas where it is loaded onto trucks for removal from the facility.

Trucks pull into a loading bay in the #21 Boiler building for wet ash loading. The wet ash system wets the ash before loading to control the particulate emissions.

The dry ash system utilizes a loading station that is outside of the #21 Boiler building. Particulate emissions are controlled with a pulse jet baghouse for dry ash loading.

Chapter 101 of the Department's regulations establishes the visible emissions limit for the ash transfer system. Visible emissions from the ash transfer shall not exceed 20% opacity on a six-minute block average, except for no more than one 6-minute block average in a one-hour period.

#### U. Parts Washer

S.D. Warren Company uses approximately 19 ZEP manufactured parts washers (degreaser units) as part of their maintenance activities.

1. In accordance with Chapter 130 section 3A of the Department regulations, S.D. Warren Company shall equip the degreasing units with the following:
  - A. Equip the degreasing units with a cover that can be operated with one hand if vapor pressure of the degreasing solution is >15 mmHG at 100°F
  - B. Affix a permanent conspicuous label summarizing the following operating standards:
    - Close cover when not in use,
    - Drain cleaned parts for at least 15 seconds or until dripping ceases,
    - If applicable, solvent spray must be a solid fluid stream and shall not exceed a pressure of 10 pounds per square inch gauge (psig),
    - Do not degrease porous or absorbent materials,
    - Do not operate degreaser if draft is greater than 131.2 feet per minute (ft/min) as measured between 3.28 and 6.56 feet upwind and at the same elevation as the tank lip), and
    - Do not operate degreaser upon occurrence of any visible leak until such leak is repaired
2. In accordance with Chapter 130, Section 3(A) of the Department regulations, S.D. Warren Company shall follow the applicable operational standards when using degreasing units. [MEDEP Chapter 130]

Periodic Monitoring

A record shall be maintained of solvent use that includes amount of solvent added and dates that solvent was added.

V. Waste Water Treatment Plant

S.D. Warren Company operates a wastewater treatment plant to treat all the process wastewater generated from mill drains and processes. S.D. Warren Company is required by the federal Clean Water Act to comply with their Maine Pollution Discharge Elimination System (NPDES) permit. By maintaining a valid MPDES permit, S.D. Warren Company's wastewater treatment facility meets Chapter 134 VOC RACT standards.

W. Printing Press

S.D. Warren Company operates a small printing press for press testing paper for quality control purposes. The printing press uses less than 50 gallons of ink per year, therefore, this process is considered insignificant as per Chapter 140, Appendix B, Section B(11) of the Department's regulations and emissions from the process are not considered in determining facility emission limits.

In order to demonstrate that this process remains an insignificant activity S.D. Warren Company shall maintain ink usage records. The records shall include the volume of ink used and shall be kept on a 12-month rolling total basis.

X. Asbestos Abatement

Certain asbestos demolition and renovation activities are subject to 40 CFR Part 61, Subpart M (Standard for Asbestos Demolition and Renovation).

Periodic Monitoring

Periodic Monitoring for regulated asbestos abatement activities at the S.D. Warren Company, Westbrook mill shall include the record keeping and monitoring requirements of 40 CFR 61, Subpart M on Asbestos demolition and Renovation.

Y. Units Containing Ozone Depleting Substances

S.D. Warren Company operates several units that require chlorofluorocarbons (CFCs and HCFCs) as refrigerant. Requirements established by 40 CFR Part 82, Subpart F apply to the servicing, maintenance and operation of this equipment.

**S.D. Warren Company  
Cumberland County  
Westbrook, Maine  
A-29-70-A-I**

)  
)  
)  
**29**

**Department  
Findings of Fact and Order  
Part 70 Air Emission License**

Persons maintaining, servicing or repairing units that contain ozone-depleting substances shall have certification as required by 40 CFR Part 82, Section 161.

Persons maintaining, servicing, repairing or disposing of appliances shall not knowingly vent or otherwise release any ozone depleting substances into the environment as prohibited by 40 CFR Part 82, Subpart F.

S.D. Warren Company shall comply with the requirements of 40 CFR Part 82, Subpart F for disposal of refrigerant containing equipment and for maintenance, service or repair of such equipment.

The units and storage or handling containers that contain ozone depleting substances are also subject to 40 CFR Part 82, Subpart E requirements for labeling.

Periodic Monitoring

Periodic monitoring for equipment that utilizes refrigerant shall include the record keeping requirements of 40 CFR Part 82, Subpart F.

Z. Facility Emissions

**Total Annual Licensed Emissions for the Facility**

(Annual licensed emissions are used to calculate license fees and are not license restrictions)

<b><u>Pollutant</u></b>	<b><u>Emissions in Tons/Year</u></b>						
	<b><u>#17, #18, #20 and #21 Boilers</u></b>	<b><u>Diesels #2 and #4</u></b>	<b><u>Tech. Center Boiler</u></b>	<b><u>#35 Research Coater Dryer</u></b>	<b><u>#20 Coater and Catalytic Incinerator</u></b>	<b><u>#2 Coater and 4th Zone Dryer</u></b>	<b><u>Total</u></b>
PM/PM <sub>10</sub>	523.0	37.7	0.2	0.4	0.5	0.7	562.5
SO <sub>2</sub>	3763.3	0.2	0.02	0.03	0.05	0.1	3763.7
NO <sub>x</sub>	1787.6	20.0	2.9	5.7	4.4	9.5	1830.1
CO	2822.5	4.3	2.5	4.9	7.9	2.5	2844.6
VOC	179.8	1.6	0.2	0.3	100	39.9	321.8

**III. AIR QUALITY ANALYSIS**

S.D. Warren Company previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards. The findings from the most recent modeling analysis are included in Amendment #16 to Air Emission License A-29-71-C-A/R. An additional ambient air quality analysis is not required for this Initial Part 70 License.

## **ORDER**

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this sources:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-29-70-A-I pursuant to MEDEP Chapter 140 and the preconstruction permitting requirements of MEDEP Chapter 115 and subject to the standard and special conditions below.

All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to **S.D. Warren Company** pursuant to the Department's preconstruction permitting requirements in Chapters 108 or 115 have been incorporated into this Part 70 license, except for such conditions that MEDEP has determined are obsolete, extraneous or otherwise environmentally insignificant, as explained in the findings of fact accompanying this permit. As such the conditions in this license supercede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in Chapter 115 for making such changes and pursuant to the applicable requirements in Chapter 140.

For each standard and special condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

### **Standard Statements**

- (1) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both;
- (2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege;
- (3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable.

- (4) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license;
- (5) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.
- (6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:
- (a) Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or
- (b) The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or effect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in an application dated September 16, 2002.

	SOURCE	CITATION	DESCRIPTION	BASIS FOR DETERMINATION
a.	Boiler #21	40 CFR Part 60 Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	Constructed prior to applicability date.
b.	Boiler #21	40 CFR Part 60 Subpart E	Standards of Performance for Incinerators	Boiler #21 is not classified as an incinerator
c.	Boiler #21	40 CFR Part 60 Subpart O	Standards of Performance for Sewage Treatment Plants	Boiler #21 is not a sewage treatment incinerator

	SOURCE	CITATION	DESCRIPTION	BASIS FOR DETERMINATION
d.	Boiler #21	Chapter 104 of MEDEP regulations	Standards for Incinerator Particulate Emissions	Boiler #21 is not classified as an incinerator
e.	Boiler #21	40 CFR Part 61 Subpart E	National Emission Standards of Performance for HAPs from Incinerators	Boiler #21 is not classified as an incinerator
f.	Boiler #21	Chapter 145 of MEDEP Regulations	NO <sub>x</sub> Control Program	Boiler #21 has < 50% heat input from fossil fuels on an annual basis
g.	Boiler #21	40 CFR Part 72 et seq	Acid Rain Program	Boiler #21 is an exempt qualifying facility
h.	Boilers #17, #18 and #20	40 CFR Part 60 Subpart D	Standards of Performance for Fossil Fuel Fired Steam Generating Units	Constructed prior to applicability date
i.	Boilers #17, #18 and #20	40 CFR Part 60 Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	Constructed prior to applicability date
j.	Boilers #17, #18 and #20	40 CFR Part 72 et. seq	Acid Rain Program	The boilers are exempt co-generation units
k.	Technology Center Boiler	Chapter 138 of MEDEP regulations	RACT for Facilities that Emit Nitrogen Oxides	The Technology Center Boiler does not have NO <sub>x</sub> emissions that reach Chapter 138 thresholds
l.	#35 Research Coater Dryer and #2 Coater dryer	Chapter 138 of MEDEP regulations	RACT for Facilities that Emit Nitrogen Oxides	The Dryers on #35 Research Coater and #2 Coater do not have NO <sub>x</sub> emissions that reach Chapter 138 thresholds.
m.	#2, #20, #70 Coaters, #35 Research Coater and the #9 Paper Machine On-line Coater	Chapter 134 of MEDEP regulations	RACT for facilities that Emit Volatile Organic Compounds	The Coaters are already subject to RACT per Chapter 123 of MEDEP regulations
n.	Catalytic Incinerator	Chapter 106 of MEDEP regulations	Low Sulfur Fuel	Chapter 106 is not applicable to sources firing natural gas



	SOURCE	CITATION	DESCRIPTION	BASIS FOR DETERMINATION
o.	Catalytic Incinerator	Chapter 134 of MEDEP regulations	RACT for facilities that Emit Volatile Organic Compounds	The catalytic incinerator is already subject to RACT per Chapter 123 of MEDEP regulations
p.	Paper Machines #9, #11 and #14	Chapter 134 of MEDEP regulations	RACT for facilities that Emit Volatile Organic Compounds	Paper machines are exempt from Chapter 134
q.	Facility	40 CFR Part 60 Subpart RR	Pressure Sensitive Tape and Labeling Surface Coating	No applicable sources at this facility
r.	Facility	40 CFR Part 4	Standards of Performance for Coal Preparations Plants	No applicable sources at this facility
s.	Facility	Chapter 132 of MEDEP regulations	Graphic Arts-Rotogravure and Flexography	No applicability sources at this facility

(7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:

- (a) Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to Chapter 140;
- (b) Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;
- (c) The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or
- (d) The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

- (8) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading and other similar programs or processes for changes that are provided for in the Part 70 license.

#### **Standard Conditions**

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license (Title 38 MRSA §347-C);

- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 140;

- (3) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request;

#### **Enforceable by State-only**

- (4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 MRSA §353.

- (5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions;

#### **Enforceable by State-only**

- (6) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license;

- (7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license.
- (8) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
- (a) perform stack testing under circumstances representative of the facility's normal process and operating conditions:
    - (i) within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;
    - (ii) to demonstrate compliance with the applicable emission standards; or
    - (iii) pursuant to any other requirement of this license to perform stack testing.
  - (b) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
  - (c) submit a written report to the Department within thirty (30) days from date of test completion.

**Enforceable by State-only**

- (9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:
- (a) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

(b) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

(c) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

**Enforceable by State-only**

(10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.

a. The licensee shall notify the Commissioner within 48 hours of a violation in emission standards and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;

b. The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 MRSA § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

c. All other deviations shall be reported to the Department in the facility's semiannual report.

- (11) Upon the written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use, and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.
- (12) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official.
- (13) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:
- (a) The identification of each term or condition of the Part 70 license that is the basis of the certification;
  - (b) The compliance status;
  - (b) Whether compliance was continuous or intermittent;
  - (d) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
  - (e) Such other facts as the Department may require to determine the compliance status of the source;

### **Specific Conditions**

- (14) Boiler #21
- A. S.D. Warren Company is licensed to operate Boiler No. 21 which is licensed to fire biomass fuel (e.g. wood chips, bark, waste paper, wood waste and sludge), coal, #6 fuel oil and #2 fuel oil.  
[MEDEP Chapter 140, BPT]
  - B. Boiler #21 SO<sub>2</sub> emissions shall not exceed 0.96 lb/MMBtu during periods that coal is fired alone or in conjunction with other licensed fuels. Compliance shall be on a 3-hour block average basis. [MEDEP Chapter 106]
  - C. Boiler #21 SO<sub>2</sub> emissions shall not exceed 0.8 lb/MMBtu during periods that oil is fired alone or in conjunction with other licensed fuels except coal. Compliance shall be on a 3-hour block average basis.  
[40 CFR Part 60, Subpart D]

- D. Boiler #21 SO<sub>2</sub> emissions shall not exceed 0.8 lb/MMBtu on a 30-day rolling average basis, regardless of fuel fired. [MEDEP Chapter 140 BPT]  
**Enforceable by State-only**
- E. Boiler #21 NO<sub>x</sub> emissions shall not exceed 0.38 lb/MMBtu during periods that coal is fired alone or in conjunction with licensed fuels. Compliance shall be on a 24-hour block average. Periods of start-up, shut down, equipment malfunction and fuel switching shall not be included in determining the 24-hour block average. [MEDEP Chapter 138]
- F. Boiler #21 NO<sub>x</sub> emissions shall not exceed 0.70 lb/MMBtu during periods that coal is fired alone or in conjunction with licensed fuels. Compliance shall be on a 3-hour block average basis. [40 CFR Part 60, Subpart D]
- G. Boiler #21 NO<sub>x</sub> emissions shall not exceed 0.3 lb/MMBtu during periods that oil is fired alone or in conjunction with other licensed fuels except coal. Compliance shall be based on 3-hour block averages basis. [40 CFR Part 60, Subpart D]
- H. S.D. Warren Company shall establish an inspection/maintenance plan for the electrostatic precipitator. The plan shall allow for maintaining a log of precipitator operation with entries made at least once per shift for the following points:
- 1) Primary and secondary voltages on each field
  - 2) Primary and secondary current on each field
- Condition (H) shall not apply after the CMS for 40 CFR Part 63, Subpart DDDDD is installed, operational and data verified pursuant to 40 CFR Part 63.8 (c)(3).
- I. Boiler #21 PM emissions shall not exceed 0.08 lb/MMBtu. [MEDEP Chapter 103, MEDEP Chapter 115 BACT]

J. Emissions from the Boiler #21 shall not exceed the following limits

Pollutant	lb/hr	Origin and Authority
PM	85.9	MEDEP Chapter 140, BPT
PM <sub>10</sub>	85.9	MEDEP Chapter 140, BPT
*SO <sub>2</sub>	1031.0	MEDEP Chapter 140, BPT
SO <sub>2</sub>	859.2	MEDEP Chapter 140, BPT
*NO <sub>x</sub>	751.8	MEDEP Chapter 140, BPT
NO <sub>x</sub>	322.2	MEDEP Chapter 140, BPT
CO	644.4	MEDEP Chapter 140, BPT
VOC	40.8	MEDEP Chapter 140, BPT

[MEDEP Chapter 140, BPT] [Enforceable by State-only]

\* Denotes emission factor during periods of coal firing alone or in conjunction with other licensed fuels.

K. Visible emissions shall not exceed 20% opacity on a six-minute block average, except for one six-minute block average per hour of not more than 27% opacity. Four hours of cold start-up or planned shutdown are exempt from opacity standards provided the Department determines that the boiler was operated in a manner consistent with good air pollution control practice to minimize air pollution during the cold start-up or planned shutdown period. [MEDEP Chapter 101, 40 CFR Part 60, Subpart A and Subpart D]

L. S.D. Warren Company shall calibrate, maintain and operate a continuous opacity monitor (COM) and continuous emission monitors (CEM) for the measurement of SO<sub>2</sub>, NO<sub>x</sub> and O<sub>2</sub> in accordance with 40 CFR Part 60, Subpart D. Compliance with the lb/MMBtu limits for SO<sub>2</sub>, NO<sub>x</sub> and the opacity limits shall be based on the monitoring data. [40 CFR Part 60, Subpart D]

M. S.D. Warren Company shall maintain records of fuel use indicating the quantity of fuel consumed (gallons, tons of biomass and coal) and the percent (%) sulfur content of the oil and coal by weight demonstrated by purchase records or certificates from the supplier. The fuel use records shall be maintained on a monthly and twelve-month rolling total. [MEDEP Chapter 140, BPT]

N. S.D. Warren Company shall perform biennial stack testing, in 2004 and every other year thereafter, to demonstrate compliance with the particulate matter emissions limits using 40 CFR Part 60, Appendix A, Method 5. [MEDEP Chapter 140, BPT]

- O. Compliance with CO and VOC limits shall be based on stack testing conducted at the Department's request.  
[MEDEP Chapter 140, BPT]

(15) Boilers #17, #18 and #20

- A. S.D. Warren Company is licensed to operate Boilers #17, #18 and #20 at restricted heat input capacities of 199.0 MMBtu/hr each firing #6 fuel oil.  
[MEDEP Chapter 140, BPT]
- B. To ensure compliance with the heat input restrictions, S.D. Warren Company shall restrict the oil supply valves or use pneumatic fuel controls on Boilers #17, #18 and #20 to ensure that none of the boilers fires more than 1,327 gallons per hr (gal/hr) of #6 fuel oil.  
[MEDEP Chapter 140, BPT]
- C. Emissions from Boilers #17, #18 and #20 each shall each not exceed the following limits:

Pollutant	Lb/MMBtu	Origin and Authority
PM	0.2	MEDEP Chapter 103
NO <sub>x</sub>	0.3	MEDEP Chapter 138

Pollutant	lb/hr	Origin and Authority
PM	39.8	MEDEP Chapter 140, BPT
PM <sub>10</sub>	39.8	MEDEP Chapter 140, BPT
SO <sub>2</sub>	418.2	MEDEP Chapter 140, BPT
NO <sub>x</sub>	59.7	MEDEP Chapter 140, BPT
CO	6.6	MEDEP Chapter 140, BPT
VOC	1.7	MEDEP Chapter 140, BPT

[Pounds per hour limits are **Enforceable by State-only**]

D. Visible Emissions

- Visible emissions from the main stack during periods when more than one of the three boilers is being operated at the same time shall not exceed 30% opacity on a 6-minute block average, except for no more than three 6-minute block averages in a 3-hour period. [MEDEP Chapter 101]
- During periods when only one of the three boilers is being operated visible emissions from the main stack shall not exceed 30% opacity on a 6-minute block average, except for no more than two 6-minute block averages in a 3-hour period. [MEDEP Chapter 101, BPT]



3. Four hours of cold start-up or planned shutdown are exempt from opacity standards provided the Department determines that the boilers were operated in a manner consistent with good air pollution control practice to minimize air pollution during the cold start-up or planned shutdown period. [MEDEP Chapter 101]
- E. S.D. Warren Company shall calibrate, operate and maintain a continuous opacity monitor (COM) on the combined stack for Boilers #17, #18 and #20. [MEDEP Chapter 117]
- F. S.D. Warren Company shall maintain records of fuel use indicating the quantity of fuel consumed and the percent sulfur content of the fuel by weight demonstrated by purchase records or certifications from the supplier. The fuel use records shall be maintained on a daily, monthly and twelve-month rolling total. [MEDEP Chapter 140, BPT]
- G. If Boiler #17, #18 or #20 is operated at greater than 10% of its annual capacity in any calendar year and stack testing for NO<sub>x</sub> was not conducted that year on that boiler, S.D. Warren Company shall conduct a stack test for NO<sub>x</sub> emissions from that boiler during the following year to demonstrate compliance with the NO<sub>x</sub> RACT emissions limits. Under this paragraph NO<sub>x</sub> testing shall not be required more often than biennially. [MEDEP Chapter 138]
- H. If Boiler #17, #18 or #20 is operated at greater than 10% of its annual capacity in any calendar year and stack testing for particulate matter was not conducted that year on that boiler, S.D. Warren Company shall conduct a stack test for particulate matter emissions from that boiler during the following year using EPA Method 5. Under this paragraph particulate matter testing shall not be required more often than biennially. [MEDEP Chapter 140, BPT]
- I. Compliance with CO and VOC limits shall be based on stack testing conducted at the Departments request. [MEDEP Chapter 140, BPT]

(16) Boiler Emissions

- A. Boilers #17, #18, #20 and #21 shall be operated in such a manner that total annual emissions from all four boilers combined does not exceed the following:

<b><u>Pollutant</u></b>	<b><u>Tons/Year</u></b>
PM	523.3
PM <sub>10</sub>	523.3
SO <sub>2</sub>	3763.5
NO <sub>x</sub>	1787.6
VOC	179.0

[MEDEP Chapter 140, BPT][**Enforceable by State-only**]

- B. S.D. Warren Company shall maintain emissions records on a monthly basis and a 12-month rolling total basis. [MEDEP Chapter 140, BPT]  
**[Enforceable by State-only]**
- C. S.D. Warren Company shall calculate annual emissions from Boiler #21 on a twelve-month rolling total, updated monthly, based on data from continuous emissions monitors (CEMs) for SO<sub>2</sub> and NO<sub>x</sub>. For PM, PM<sub>10</sub>, and VOC from Boiler #21, for all other criteria pollutants from Boilers #17, #18 and #20 and for when CEM data is not available for SO<sub>2</sub> and NO<sub>x</sub> from Boiler #21, S.D. Warren Company shall calculate annual emissions on a twelve-month rolling total, updated monthly, based on fuel consumption using the emission factors in the following tables: [MEDEP Chapter 140, BPT]

**#21 Boiler**

<b><u>Pollutant</u></b>	<b><u>Emissions Factor</u></b>			
	<b><u>(Biomass)</u></b>	<b><u>(#6 fuel oil)</u></b>	<b><u>(coal)</u></b>	<b><u>(#2 fuel oil)</u></b>
PM	0.72	0.012	2.12	0.0112
PM <sub>10</sub>	0.72	0.012	2.12	0.0112
SO <sub>2</sub>	7.2	0.12	2.73	0.112
NO <sub>x</sub>	3.42	0.047	18	0.024
VOC	0.342	0.0016	0.3	0.00056

- \* Emissions factors are expressed in pounds of pollutant per gallon of fuel fired (lb/gal) for #6 and #2 fuel oil use or pounds of pollutant per ton of biomass or coal fired (lb/ton).

**#17, #18 and #20 Boilers**

<b><u>Pollutant</u></b>	<b><u>Emission factor</u> <u>(#2 fuel oil)</u></b>	<b><u>Emission factor</u> <u>(#6 fuel oil)</u></b>
PM	0.03	0.03
PM <sub>10</sub>	0.03	0.03
SO <sub>2</sub>	0.07	0.11
NO <sub>x</sub>	0.045	0.045
VOC	0.0003	0.0013

\* Emissions factors are expressed in pounds of pollutant per gallon of fuel fired (lb/gal) for #6 and #2 fuel oil use.

(17) Main Stack Height Reduction

S.D. Warren shall be permitted, but is not required, to reduce the height of the main stack to no lower than 250 feet above ground if the facility commits to firing only #6 fuel oil with a sulfur content not to exceed 0.7% sulfur by weight. S.D. Warren shall provide proof of the fuel oil change through fuel records that include receipts or certification from the fuel oil supplier that indicate sulfur content of the fuel. [MEDEP Chapter 140, BPT]

(18) Waste Oil Firing

- A. S.D. Warren Company is licensed to fire a combined total of 10,000 gallons per year of “specification waste oil” and “off-specification waste oil” in boilers #17, #18, #20 and #21 based on a twelve-month rolling total. Only waste oil meeting the criteria “specification waste oil” or “off-specification waste oil” (as defined in the Department’s “Waste Oil Management Rules”) shall be burned in the boilers. [MEDEP Chapter 140, BPT]
- B. S.D. Warren Company shall maintain a record of the amount of waste oil added to the #6 fuel oil tank. The record shall include the date and amount of waste oil added and documentation that the waste oil meets the definition of “specification” or “off-specification” waste oil as defined by the Department’s “Waste Oil Management Rules”. The record of the amount of waste oil added shall be maintained on a monthly basis as well as a twelve-month rolling total. [MEDEP Chapter 140, BPT]

(19) Diesel Engines

- A. S.D. Warren Company shall equip, operate and maintain an operating time meter on Diesel #2. [MEDEP Chapter 140, BPT]

**S.D. Warren Company  
Cumberland County  
Westbrook, Maine  
A-29-70-A-I**

)  
)  
)  
**44**

**Department  
Findings of Fact and Order  
Part 70 Air Emission License**

- B. S.D. Warren Company shall limit Diesel #2 to 2374 hours of operation per year based on a 12-month rolling total. [MEDEP Chapter 140, BPT]
- C. S.D. Warren Company shall fire #2 fuel oil fuel with a sulfur content not to exceed 0.5% sulfur by weight in Diesels #2 and #4.  
[MEDEP Chapter 140, BPT]
- D. Emissions from Diesels #2 and #4 shall be limited to the following:

**Diesel #2**

<b>Pollutant</b>	<b>lb/hr</b>	<b>Origin and Authority</b>
PM	0.6	MEDEP Chapter 140, BPT
PM <sub>10</sub>	0.6	MEDEP Chapter 140, BPT
SO <sub>2</sub>	0.1	MEDEP Chapter 140, BPT
NO <sub>x</sub>	8.4	MEDEP Chapter 140, BPT
CO	1.8	MEDEP Chapter 140, BPT
VOC	0.7	MEDEP Chapter 140, BPT

**[Enforceable by State-only]**

**Diesel #4**

<b>Pollutant</b>	<b>lb/hr</b>	<b>Origin and Authority</b>
PM	0.2	MEDEP Chapter 140, BPT
PM <sub>10</sub>	0.2	MEDEP Chapter 140, BPT
SO <sub>2</sub>	0.02	MEDEP Chapter 140, BPT
NO <sub>x</sub>	2.2	MEDEP Chapter 140, BPT
CO	0.5	MEDEP Chapter 140, BPT
VOC	0.2	MEDEP Chapter 140, BPT

**[Enforceable by State-only]**

- E. Visible emissions from Diesels #2 and #4 each shall not exceed 30% opacity on a 6-minute block average, except for no more than two 6-minute block averages in a 3-hour period. [MEDEP Chapter 101]
- F. S.D. Warren Company shall maintain records of monthly hour meter readings for Diesel #2. [MEDEP Chapter 140, BPT]

(20) Technology Center Boiler

- A. S.D. Warren Company is licensed to operate the Technology Center Boiler, which is licensed to fire natural gas. [MEDEP Chapter 140, BACT]
- B. Emissions from the Technology Center Boiler shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority
PM	0.12	MEDEP Chapter 103

Pollutant	lb/hr	Origin and Authority
PM	0.1	MEDEP Chapter 140, BPT
PM <sub>10</sub>	0.1	MEDEP Chapter 140, BPT
SO <sub>2</sub>	0.004	MEDEP Chapter 140, BPT
NO <sub>x</sub>	0.7	MEDEP Chapter 140, BPT
CO	0.6	MEDEP Chapter 140, BPT
VOC	0.04	MEDEP Chapter 140, BPT

[Enforceable by State-only]

- C. S.D. Warren Company shall operate the Technology Center Boiler such that the visible emissions from the stack do not exceed 10% opacity on a 6-minute block average basis. [MEDEP Chapter 140, BACT]

(21) #35 Research Coater

- A. #35 Research Coater shall operate such that VOC emissions do not exceed 2.9 pounds of VOC per gallon of coating applied. [MEDEP Chapter 123]
- B. S.D. Warren Company shall maintain records of coatings on site for the #35 Research Coater on a monthly basis. The coatings use record shall include the following:
- 1) Time period;
  - 2) Total VOCs emitted; and
  - 3) Certification stating all coatings used on the #35 Research Coater have an as applied VOC content less than 2.9 pounds of VOC per gallon of coating, excluding water and exempt compounds.  
[MEDEP Chapter 123]
- C. The record of VOCs emitted shall be maintained on a twelve-month rolling total basis as well as monthly.  
[MEDEP Chapter 140, BPT] [Enforceable by State-only]

**S.D. Warren Company  
Cumberland County  
Westbrook, Maine  
A-29-70-A-I**

)  
)  
)  
**46**

**Department  
Findings of Fact and Order  
Part 70 Air Emission License**

(22) Dryer on #35 Research Coater

- A. S.D. Warren Company is licensed to operate the Dryer on #35 Research Coater which is licensed to fire natural gas. [MEDEP Chapter 140, BACT]
- B. Emissions from fuel burning in Dryer on #35 Research Coater shall not exceed the following limits:

<b>Pollutant</b>	<b>lb/hr</b>	<b>Origin and Authority</b>
PM	0.1	MEDEP Chapter 140, BPT
PM <sub>10</sub>	0.1	MEDEP Chapter 140, BPT
SO <sub>2</sub>	0.01	MEDEP Chapter 140, BPT
NO <sub>x</sub>	1.3	MEDEP Chapter 140, BPT
CO	1.1	MEDEP Chapter 140, BPT
VOC	0.07	MEDEP Chapter 140, BPT

**[Enforceable by State-only]**

- C. S.D. Warren Company shall operate the Dryer on #35 Research Coater such that the visible emissions from the stack do not exceed 10% opacity on a 6-minute block average basis. [MEDEP Chapter 140, BACT]

(23) #70 Coater

- A. #70 Coater shall operate such that VOC emissions do not exceed 2.9 pounds of VOC per gallon of coating applied (excluding water and exempt compounds). [MEDEP Chapter 123]
- B. S.D. Warren Company shall maintain records of the following on site for the #70 Coater on a monthly basis:
- 1) Time period;
  - 2) Coating identification number or name and amount of VOC containing constituents used;
  - 3) Diluent identification number or name and amount of diluent used (excluding water and exempt compounds);
  - 4) Mass of VOC per volume of each coating, excluding water and exempt compounds, as applied;
  - 5) Total VOCs emitted; and
  - 6) Certification stating all coatings used on the #70 Coater have an as applied VOC content less than 2.9 pounds of VOC per gallon of coating, excluding water and exempt compounds.  
[MEDEP Chapter 123]

C. S.D. Warren shall maintain records of VOC emissions on a twelve-month rolling total basis. [MEDEP Chapter 140, BPT] **[Enforceable by State-only]**

(24) #20 Coater

A. The #20 Coater shall operate such that VOC emissions do not exceed 2.9 pounds of VOC per gallon of coating applied (excluding water and other exempt compounds). [MEDEP Chapter 123]

B. If the coater is to be operated with a coating containing a greater than 2.9 pounds of VOC per gallon of coating applied (excluding water and other exempt compound), then the coater must be operated in conjunction with an add-on air pollution control device that will reduce overall VOC emissions by 95% or to a rate equal to 4.8 pounds of VOC per gallon of solids applied. [MEDEP Chapter 123]

C. S.D. Warren Company shall maintain records of the following on site for the #20 Coater on a monthly basis:

- 1) coating line number;
- 2) the time period of use;
- 3) the coating identification number or name;
- 4) amount of coating used;
- 5) the diluent identification number or name;
- 6) the amount of diluent used.

[MEDEP Chapter 123]

D. If S.D. Warren Company can certify to the Department that all of the coatings used on #20 Coater have an as applied VOC content of less than 2.9 pounds per gallons of coating applied, excluding water and exempt compounds, the records, identified in paragraph (C) above, are required to be kept on a monthly basis. The monthly record shall also include total VOCs emitted. [MEDEP Chapter 123]

E. S.D. Warren Company shall maintain records of diluents and solvents used for cleanup operations that shall include diluent or solvent identification number and the amount used. [MEDEP Chapter 123] **[Enforceable by State-only]**

F. The VOC emissions record shall be maintained on a twelve-month rolling total basis as well as monthly. [MEDEP Chapter 140, BPT] **[Enforceable by State-only]**

- G. S.D. Warren Company shall not exceed a total annual emissions limit of 100 tons per year of VOCs generated from the coating process of #20 Coater based on a twelve-month rolling total. [MEDEP Chapter 140, BPT]  
**[Enforceable by State-only]**

(25) Catalytic Incinerator

- A. S.D. Warren Company shall operate the catalytic incinerator as an add-on control device for VOC control when applying coatings on #20 Coater containing in excess 2.9 pounds of VOC per gallon of coating applied (excluding water and other exempt compounds). If the catalytic incinerator is used, S.D. Warren Company shall meet the requirements of this condition. [MEDEP Chapter 123]
- B. S.D. Warren Company shall operate the catalytic incinerator such that it will reduce overall VOC emissions by 95% or to a rate equal to 4.8 pounds of VOC per gallon of solids applied. [MEDEP Chapter 123]
- C. To demonstrate the capture and control efficiency of the incinerator, S.D. Warren Company shall perform biennial emissions testing on the catalytic incinerator in accordance with Chapter 126 of the Department regulations while running ETL coatings. [MEDEP Chapter 126]
- D. S.D. Warren Company shall maintain a copy of the capture efficiency testing protocol and submit the results to the Department within 60 days of the test. [MEDEP Chapter 126]
- E. S.D. Warren Company shall operate the catalytic incinerator such that it will have a 0.5-second gas retention time. [MEDEP Chapter 123]
- F. S.D. Warren Company shall continuously monitor and record the incinerator exhaust temperature (°F), the temperature rise across the bed (°F), and the dates of catalyst bed changes. [MEDEP Chapter 123]
- G. S.D. Warren Company shall maintain the incinerator inlet temperature at no less than 775°F during coating operations. [MEDEP Chapter 140, BPT]  
**[Enforceable by State-only]**
- H. S.D. Warren Company shall maintain water flow to the wet scrubber on the air knife coater at all times during coating operations.  
 [MEDEP Chapter 140, BPT] **[Enforceable by State-only]**



- I. S.D. Warren shall continue to implement the DEP approved catalyst maintenance program for the catalytic incinerator, which includes the following:
- Add enough catalyst to maintain the bed at a depth of eight inches;
  - Measure the pressure drop across the bed at normal operating conditions while running ETL coating.
  - Whenever the pressure drop across the bed drops below 90% of the baseline while running ETL, add one 250-pound drum of catalyst.
- [MEDEP Chapter 140, BPT] **[Enforceable by State-only]**
- J. Emissions from the catalytic incinerator shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority
PM	0.12	MEDEP Chapter 140, BPT
PM <sub>10</sub>	0.12	MEDEP Chapter 140, BPT
SO <sub>2</sub>	0.006	MEDEP Chapter 140, BPT
NO <sub>x</sub>	1.0	MEDEP Chapter 140, BPT
CO	1.8	MEDEP Chapter 140, BPT

**[Enforceable by State-only]**

- K. Visible emissions from the natural gas fired catalytic incinerator shall not exceed 20% opacity on a 6-minute block average during periods when the coater is running ETL coating and 10% opacity on a 6-minute block average when the coater is running any other coating. [MEDEP Chapter 140, BPT]

(26) #2 Coater

- A. The #2 Coater shall operate such that VOC emissions do not exceed 2.9 pounds of VOC per gallon of coating applied, excluding water and other exempt compounds. [MEDEP Chapter 123]
- B. S.D. Warren Company shall maintain records of the following on site for #2 Coater on a monthly basis:
- 1) Time period;
  - 2) Coating identification number or name and amount of VOC containing constituents used;
  - 3) Diluent identification number or name and amount of diluent used (excluding water and exempt compounds);
  - 4) Mass of VOC per volume of each coating, excluding water and exempt compounds, as applied;
  - 5) Total VOCs emitted; and

- 6) Certification stating all coatings used on the #2 Coater have an as applied VOC content less than 2.9 pounds of VOC per gallon of coating, excluding water and exempt compounds.

[MEDEP Chapter 123]

- C. S.D. Warren shall maintain records of VOC emissions on a twelve-month rolling total basis. [MEDEP Chapter 140, BPT] [**Enforceable by State-only**]
- D. S.D. Warren Company shall not exceed a total annual emissions limit of 39.7 tons per year of VOCs generated from the coating process of #20 Coater based on a twelve-month rolling total. [MEDEP Chapter 140, BPT]

(27) 4<sup>th</sup> Zone Dryer on #2 Coater

- A. S.D. Warren Company is licensed to operate the 4<sup>th</sup> Zone Dryer on #2 Coater which is licensed to fire natural gas. [MEDEP Chapter 140, BACT]
- B. Emissions from fuel burning in the 4<sup>th</sup> Zone Dryer on #2 Coater shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority
PM	0.05	MEDEP Chapter 140, BPT
PM <sub>10</sub>	0.05	MEDEP Chapter 140, BPT
SO <sub>2</sub>	0.005	MEDEP Chapter 140, BPT
NO <sub>x</sub>	0.6	MEDEP Chapter 140, BPT
CO	0.5	MEDEP Chapter 140, BPT
VOC	0.03	MEDEP Chapter 140, BPT

[MEDEP Chapter 140, BPT] [**Enforceable by State-only**]

- C. S.D. Warren Company shall operate the Dryer on the 4<sup>th</sup> Zone Dryer on #2 Coater such that the visible emissions from the stack do not exceed 10% opacity on a 6-minute block average basis, except for not more than one 6-minute block average in a 3-hour period. [MEDEP Chapter 101]

(28) #9 Paper Machines and On-Line Coater

- A. The #9 Paper Machine On-line Coater shall operate such that VOC emissions do not exceed 2.9 pounds of VOC per gallon of coating applied. [MEDEP Chapter 123]
- B. S.D. Warren Company shall maintain records of the following on site for the #9 Paper Machine On-line Coater on a monthly basis:

- 1) Time period;

- 2) Coating identification number or name and amount of VOC containing constituents used;
- 3) Diluent identification number or name and amount of diluent used (excluding water and exempt compounds);
- 4) Mass of VOC per volume of each coating, excluding water and exempt compounds, as applied;
- 5) Total VOCs emitted; and
- 6) Certification stating all coatings used on the #2 Coater have an as applied VOC content less than 2.9 pounds of VOC per gallon of coating, excluding water and exempt compounds.

[MEDEP Chapter 123]

- C. S.D. Warren shall maintain records of VOC emissions on a twelve-month rolling total basis. [MEDEP Chapter 104] **[Enforceable by State-only]**

(29) Bulk Starch and Clay Handling Systems

- A. S.D. Warren Company shall develop and follow an inspection and maintenance program to provide for the proper operation of the bulk handling systems to ensure that the systems do not cause excess emissions.

[MEDEP Chapter 140, BPT]

- B. The inspection/maintenance program shall provide for monthly inspections of the systems and a record of inspections and required maintenance.

[MEDEP Chapter 140, BPT]

(30) Gasoline Storage Tank

- A. The fill pipe shall extend within 6 inches of the bottom of the gasoline storage tank. [MEDEP Chapter 118]

- B. S.D. Warren Company shall maintain records of the monthly and annual throughput of gasoline. [MEDEP Chapter 118]

(31) Ash Loading Systems

- A. S.D. Warren Company shall develop and follow an inspection and maintenance program to provide for the proper operation of the ash loading systems to ensure that the systems do not cause excess emissions.

[MEDEP Chapter 140, BPT]

- B. The inspection/maintenance program shall provide for monthly inspections of the ash loading systems and a record of inspections and required maintenance.

[MEDEP Chapter 140, BPT]

(32) Parts Washer

A. S.D. Warren Company shall equip parts degreasing units with the following:

1. Equip the degreaser with a cover that can be operated with one hand if vapor pressure of the solvent is >15 mmHG at 100°F
2. Affix a permanent conspicuous label summarizing the following operating standards:
  - Close cover when not in use,
  - Drain cleaned parts for at least 15 seconds or until dripping ceases,
  - If applicable, solvent spray must be a solid fluid stream and shall not exceed a pressure of 10 pounds per square inch gauge (psig),
  - Do not degrease porous or absorbent materials,
  - Do not operate degreaser if draft is greater than 131.2 feet per minute (ft/min) as measured between 3.28 and 6.56 feet upwind and at the same elevation as the tank lip), and
  - Do not operate degreaser upon occurrence of any visible leak until such leak is repaired

[MEDEP Chapter 130]

B. S.D. Warren Company shall follow the applicable operational standards when operating the parts degreaser. [MEDEP Chapter 130]

C. Records shall be maintained of solvent used by S.D. Warren Company in the parts degreaser, which shall include volume of solvent added and dates that solvent was added. [MEDEP Chapter 130]

D. Handling, storage and disposal of solvent shall be done in accordance with Chapter 130 Section 4 of the Departments regulations. [MEDEP Chapter 130]

(33) Asbestos Abatement

When undertaking regulated asbestos abatement activities, S.D. Warren Company shall comply with the Standard for Asbestos Demolition and Renovation 40 CFR Part 61, Subpart M. [40 CFR, Part 61]

(34) Units Containing Ozone Depleting Substances

When repairing or disposing of units containing ozone depleting substances, S.D. Warren Company shall comply with the Standards for Recycling and Emission Reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. [40 CFR, Part 82, Subpart F]

(35) General Process Sources

All wood conveyors and transfer points shall be covered or enclosed except for the fuel truck unloading area. Visible emissions from any general process source (including chippers) shall not exceed an opacity of 20% on a 6-minute block average basis, except for no more than one 6-minute block average in a 1-hour period.

[MEDEP Chapter 101] **Enforceable by State Only**

(36) Fugitive Emissions

Potential sources of fugitive PM emissions, including material stockpiles and unpaved roadways, shall be controlled as needed by wetting with water, with calcium chloride, or other methods as approved by the Bureau of Air Quality to prevent visible emissions in excess of 20% opacity, except for no more than 5 minutes in any one-hour period. [MEDEP Chapter 101] **Enforceable by State Only**

(37) Record Keeping Requirements

Periodic Monitoring

A. The following is a list of the periodic monitoring required by this license:

1. S.D. Warren Company shall maintain a record of #21 Boiler fuel use that shall include the type of fuels fired, the amount of fuel fired and purchase receipts or supplier certifications indicating percent sulfur content for the #2 fuel oil, #6 fuel oil and the coal. Fuel record shall be based on a twelve-month rolling total.
2. S.D. Warren Company shall maintain a log of precipitator operation with entries made at least once per shift for the following points:
  - 1) Primary and secondary voltages on each field
  - 2) Primary and secondary current on each field
3. S.D. Warren Company shall maintain a record of #17, #18 and #20 Boiler fuel use that shall include the amount of fuel fired and purchase receipts or supplier certifications indicating percent sulfur content for the #2 fuel oil and #6 fuel oil. Fuel record shall be based on a twelve-month rolling total.
4. S.D. Warren Company shall maintain a record of total emissions from all the boilers in accordance with Condition (16). The emissions record shall be maintained monthly and on a twelve-month rolling total basis.

5. S.D. Warren Company shall maintain a record of waste oil fired in the boilers. The record shall include the amount of oil added to the #6 fuel oil tank, the date that the waste oil was added and results of an annual analysis of a representative sample of the waste oil that indicates that the waste oil meets the definition of “specification” or “off-specification” waste oil found in the Department’s Waste Oil Management Rules.
6. S.D. Warren shall maintain the log of hour meter readings for the #2 Diesel unit on a monthly and a twelve-month rolling total basis.
7. S.D. Warren Company shall maintain a record of VOC emissions on the #35 Research Coater, #70 Coater, #2 Coater and #9 Paper Machine On-Line Coater as required by Chapter 123 of the Department’s regulations. The VOC emissions records for each coater shall be maintained on a twelve-month rolling total basis in addition to the Chapter 123 requirements.
8. S.D. Warren Company shall follow an inspection/maintenance plan for the bulk handling systems.
9. S.D. Warren Company shall maintain a record of inspections and required maintenance on the bulk handling systems.
10. S.D. Warren Company shall maintain a record of VOC emissions on the #20 Coater as required by Chapter 123 of the Department’s regulations. The VOC emissions records shall be maintained on a twelve-month rolling total basis in addition to the Chapter 123 requirements.
11. S.D. Warren Company shall maintain capture efficiency testing records as required by Chapter 126 of the Department’s regulations for the #20 Coater Catalytic Incinerator.
12. S.D. Warren Company shall maintain records of the monthly and annual throughput of gasoline for the gasoline storage tank.
13. S.D. Warren Company shall maintain records of solvent use for the parts degreaser. The record shall include the amount of solvent added and the dates that solvent was added.
14. S.D. Warren Company shall perform the record keeping requirements of 40 CFR Part 61, Subpart M Standard for Asbestos Demolition and Renovation.

15. S.D. Warren Company shall perform the record keeping requirements of 40 CFR Part 82, Subpart F (the Standards for Recycling and Emission Reduction).

**B. Catalytic Incinerator Monitors**

If a monitor required by Condition 25(F) is recording accurate and reliable data less than 98% of the source-operating time within any quarter of the calendar year, The Department may initiate enforcement action and may include in that enforcement action any period of time that the monitor was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance control procedures of unavoidable malfunctions.

(38) **CEMS and COMS**

**A. Performance Specifications**

All CEMS and COMS shall meet the sampling and performance criteria specified in 40 CFR Part 51 Appendix P, and shall be operated in accordance with 40 CFR Part 60 Appendix F and Chapter 117 of the Department's regulations.

1. Conduct Relative Accuracy Testing (RATA) and/or Performance Audits in accordance with Chapter 117 of the Department's regulations. [MEDEP Chapter 117]
2. Develop and maintain an updated quality assurance plan for all CEMS and COMS in accordance with 40 CFR Part 60 Appendix F and Chapter 117 of the Department's regulations.  
[MEDEP Chapter 117]
3. If the continuous emission monitoring system for the gaseous emissions is recording accurate and reliable data less than 90% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the CEMS was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures of unavoidable malfunctions. [MEDEP Chapter 117]

4. If the continuous opacity monitoring system is recording accurate and reliable data less than 95% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the continuous emission monitoring system was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction so the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions. [MEDEP Chapter 117]

**B. Record keeping**

For all of the continuous emission monitoring (CEMS), continuous opacity monitor (COMS) and recording required by this license, the licensee shall maintain records of the most current six-year period and the records shall include:

1. Documentation which shows monitor operational status during all source operating time, including specifics for calibration and audits; and [MEDEP Chapter 117]
2. A complete monitored emissions data set of SO<sub>2</sub>, NO<sub>x</sub>, O<sub>2</sub> and opacity for #21 Boiler and Main Stack opacity for #17, #18 and #20 Boilers, as specified in this license. All records shall be made available to the Bureau of Air Quality upon request. [MEDEP Chapter 117]
3. For all CEMS and COMS, the records shall include:
  - a. Documentation that all CEMS and COMS are continuously accurate, reliable and operated in accordance with Chapter 117, 40 CFR Part 51, Appendix P, and 40 CFR Part 60, Appendices B and F; [MEDEP Chapter 117]
  - b. Records of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each CEMS and COMS as required by 40 CFR Part 51 Appendix P; [MEDEP Chapter 117]



C. Quarterly Reporting

The licensee shall submit a Quarterly Report to the Bureau of Air Quality within 30 days after the end of each calendar quarter, detailing the following, for the control equipment, parameter monitors, Continuous Emission Monitoring Systems (CEMS) or Continuous Opacity Monitoring Systems (COMS) required by this license. [MEDEP Chapter 117]

1. All control equipment downtimes and malfunctions;
2. All CEMS or COMS downtimes and malfunctions;
3. All parameter monitor downtimes and malfunctions;
4. All excess events of emission and operational limitations set by this Order, Statute, state or federal regulations, as appropriate. The following information shall be reported for each excess event;
  - a. Standard exceeded;
  - b. Date, time, and duration of excess event;
  - c. Maximum and average values of the excess event, reported in the units of the applicable standard, and copies of pertinent strip charts and printouts when requested;
  - d. A description of what caused the excess event;
  - e. The strategy employed to minimize the excess event; and
  - f. The strategy employed to prevent reoccurrence.
5. A report certifying there were no excess emissions, if that is the case.

(39) Reporting

S.D. Warren Company shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard.  
(Title 38 MRSA §605-C).

(40) Stack Testing

Unless otherwise specified in this license, compliance with the emission limits shall be determined on the basis of stack testing conducted upon the request of the Department and in accordance with the methods in 40 CFR Part 60, or such other method as may be approved by the Department. When stack testing for particulate matter is required, S.D. Warren Company shall use EPA Method 5, and may report all PM emissions measured by Method 5 as PM<sub>10</sub>. Testing using EPA Method 201, 201A or 202 is not required for demonstration of compliance for PM<sub>10</sub> emission limits as given in this license. [MEDEP Chapter 140, BPT]

(41) Semiannual Reporting

The licensee shall submit semiannual reports every six months to the Bureau of Air Quality. The initial semiannual report is due July 31, 2004. Subsequent reports shall be due on January 31 and July 31 of each year.

- A. Each semiannual report shall include a summary of the periodic monitoring required by this license and listed in condition (38) of this license.
- B. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.  
[MEDEP Chapter 140]

(42) Annual Compliance Certification

S.D. Warren Company shall submit an annual compliance certification to the Department in accordance with Standard Condition (13) of this license. The initial annual compliance certification is due January 31, 2005 and subsequent annual compliance certifications shall be due January 31 of each year. Certification of compliance is to be based on the stack testing or monitoring data required by this license. Where the license does not require such data, or the license requires such data upon request of the Department and the Department has not requested the testing or monitoring, compliance may be certified based upon other reasonably available information such as the design of the equipment or applicable emissions factors. [MEDEP Chapter 140]

(43) Annual Emission Statement

In accordance with MEDEP Chapter 137, the licensee shall annually report to the Department the criteria pollutant emissions information necessary to accurately update the State's emission inventory by means of:

- 1) A computer program and accompanying instructions supplied by the Department; Or
- 2) A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator  
 Maine DEP  
 Bureau of Air Quality  
 17 State House Station  
 Augusta, ME 04333-0017

Phone: (207) 287-2437

The initial emission statement must be submitted by September 1, 2004, and subsequent emissions statements shall be due by September 1 of each year.

(44) Certification by a Responsible Official

Quarterly reports, semiannual reports, and annual compliance certifications required by this license to be submitted to the Bureau of Air Quality must be signed by a responsible official. [MEDEP Chapter 140]

(45) Hazardous Air Pollutants for Paper Coating MACT

S.D. Warren Company is subject to the “National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coatings”.

(46) The licensee is subject to the State regulations listed below.

<u>Origin and Authority</u>	<u>Requirement Summary</u>	<u>Enforceability</u>
Chapter 102	Open Burning	-
Chapter 109	Emergency Episode Regulation	-
Chapter 110	Ambient Air Quality Standard	-
Chapter 116	Prohibited Dispersion Techniques	-
38 M.R.S.A. Section 3 §585-B, sub-§5	Reduce Mercury Use and Emissions	Enforceable by State-only

(47) S.D. Warren Company shall pay the annual air emission license fee within 30 days of June 30 of each year. Pursuant to 38 MRSA 353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for the revocation of the license under 38 MRSA 341-D, Subsection 3.

(48) Operational flexibility for insignificant units and activities

S.D. Warren Company may add or modify units and activities that are identified as “categorically exempt” insignificant units and activities under Appendix B, Section A of Chapter 140 of the Department’s regulations. Addition or modification of such units and activities does not require a license amendment or notice to the Department.

S.D. Warren Company may add or modify units and activities that are identified “insignificant based on size or production rate” under Appendix B, Section B Chapter 140 of the Department’s regulations. S.D. Warren Company shall provide notice to the Department within 30 days of such installation or modification. Addition or modification of such units and activities does not require a license amendment. [MEDEP Chapter 140, BPT]

(49) Submission of Reports

All reports and other documents required to be submitted to the Department shall be deemed to have been submitted on the date postmarked or the date received by the Department, whichever is earlier. [MEDEP Chapter 140, BPT]

(50) The term of this license shall be five (5) years from the signature date below.

DONE AND DATED IN AUGUSTA, MAINE THIS                      DAY OF                      2003.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: August 6, 1996

Date of application acceptance: August 22, 1996

Date filed with the Board of Environmental Protection \_\_\_\_\_

This Order prepared by Peter G. Carleton, Bureau of Air Quality.